

FULFILLING THE PROMISE FOR DIVERSITY AND INCLUSION
IN RESEARCH AND SCHOLARSHIP



USC University of
Southern California
Office of Research

STRATEGIC PLAN 2018



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Silvia da Costa, Director of Faculty Research Relations
Randolph Hall, Vice President of Research

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University Mission and Values for Research and Scholarship

Research and scholarship are central to USC's mission of development of individuals and society through cultivation and enrichment of the human mind and spirit. To be effective in this cause, the university must ensure that our work benefits all segments of society, and is innovative and impactful. Given our location at the center of one of the most diverse cities in the world, and our commitment to enhancing diversity, it is essential that USC be a leader in research that helps and engages diverse populations. This plan aims to achieve this goal in research and scholarship throughout the university.

Diversity and Inclusion, as Reflected in USC's Strategic Planning

Diversity is critical to USC's strategy for excellence and impact. As stated in our *Strategic Vision*:

We must create a transformative faculty whose scholarship crosses disciplinary boundaries and whose energy sparks intellectual creativity across our campuses. New modes of learning and societal needs require that we reinvent undergraduate, graduate, and postdoctoral education. **Changing demographics and public demands require we provide greater access to, and accountability in, higher education.**

Los Angeles is home to arguably the greatest geo-religious diversity in the world. **USC's diversity, in this as in other areas, is a unique attribute.** As appropriate in a secular university with people of diverse viewpoints, all students are encouraged to consider and talk about core ethical questions related to meaning, purpose, and identity and to engage faculty, staff, and administrators in conversations about their personal perspectives and the aspects of their lives that provide meaning and inspiration.

USC has been guided by its founding core values: **free inquiry, the search for truth, appreciation of diversity, service to community, respect and care for others, and ethical conduct.**

Our ultimate goal is to create a culture of transformative scholarship, **founded on the strengths of a diverse campus in an urban setting, including a racially, ethnically and intellectually diverse faculty.**

USC's Code of Ethics further defines the values that guide our university, including values of acceptance, respect and dignity for diverse people and points of view:

We nurture an environment of mutual respect and tolerance. **As members of the USC community, we treat everyone with respect and dignity, even when the values, beliefs, behavior, or background of a person or group is repugnant to us.** This last is one of the bedrocks of ethical behavior at USC and the basis of civil discourse within our academic community. Because we are responsible not only for ourselves but also for others, we speak out against hatred and bigotry whenever and wherever we find them.

Ethics and vision together are a cornerstone from which our efforts for diversity and inclusion in research and scholarship can grow.

University Research Committee Recommendations

Although diversity is a clearly stated goal for USC, we have not previously developed a plan on how to achieve diversity in research and scholarship. Toward that end, the University Research Committee (a joint Academic Senate/Provost committee) was charged in 2016 with developing recommendations on how to define and enhance diversity. Their report (provided in the Appendices) highlights the following principles:

- We believe that diversity in the research enterprise should be one of the primary considerations of the university. We also believe that it is not independent of other diversity goals of the university. Our goals are to:
- Create an environment where students who are under-represented in a discipline (including the research enterprise of that discipline) are more likely to participate in research (as, due to lack of networking and mentorship, they are less likely to take advantage of such opportunities),
- Incentivize faculty to engage students who are under-represented in a discipline in research projects, thus also improving faculty-student engagement in the university, and
- Provide resources to support research projects of students who are under-represented in a discipline (to mitigate difficulties with time commitment to research due to commitments to outside work).

Mission for Research and Scholarship

To meet our potential, USC must plan for a future where diversity is central to all aspects of our research and scholarship. We recognize that our research will become more impactful and significant if informed by diverse perspectives and backgrounds, from people who are actively engaged in all aspects of our research. To be successful in our research, labs, departments, centers, schools and the university need to welcome and encourage diverse perspectives that come from diverse backgrounds. Thus, we recognize that USC's reputation for outstanding research and scholarship will be elevated if we succeed in diversity and inclusion.

Specifically, we will seek excellence within **six pillars of research and scholarship**, three focused on *diverse participation* (faculty students and staff) and three focused on *diverse scholarly and creative programs* (studying diversity, inclusion, equity, human subjects and community engagement):



FACULTY: Recruit, hire, promote, and retain diverse faculty and other researchers and scholars.



STUDENTS: Recruit, train, and graduate diverse students and postdoctoral scholars, so that they may become researchers, or may be informed by research methods in a wide range of future careers, making opportunities for conducting research broadly inclusive.



STAFF: Recruit, hire, promote and retain diverse staff supporting research in the capacity of research administration and advancement.



RESPONSIVE RESEARCH - STUDYING DIVERSITY & INCLUSION: Investigate the role of diversity and inclusion, equity, justice and access in society, along with the opportunities and barriers to success today, in the past, and in the future.



CLINICAL TRIALS AND OTHER HUMAN SUBJECT RESEARCH: Engage diverse communities and individuals to participate as subjects in our research, so that the research findings reflect any unique aspects of diverse populations.



COMMUNITY ENGAGEMENT: Conduct research that is informed by and serves the needs of diverse communities.

Our approach to diversity and inclusion will also reflect the unique aspects of the location where we reside and the relationships available to us. Our partnerships with Los Angeles County Department of Health Services, Children's Hospital of Los Angeles, and other health agencies offer the opportunity to engage ethnicities and economic groups that are traditionally under-represented in clinical research. Diversity and inclusion have been a distinguishing feature of major research centers at USC, including our Clinical and Translational Science Institute, Alzheimer's Disease Research Center, Norris Comprehensive Cancer Center and Roski Eye Institute. Likewise, initiatives to study homelessness, urban education, and pollution exposure are examples of ways USC conducts community-engaged research with diverse populations. In the future, USC can expand on these programs by unifying our strategy toward diversity and inclusion.

In this plan, we recognize that USC will become a stronger university by better defining diversity and inclusion as it applies to research, accounting for the regulatory and funding environment in which we operate, as well as the uniqueness of our university and our location. Our sponsors encourage diversity through targeted programs or through considerations in their selection processes, but do not recognize all aspects of diversity that may be important to the university. While we must comply with regulations, and consider sponsor expectations, we have the opportunity to define diversity and inclusion in ways that achieve success beyond what the external environment may dictate.

Diversity and Inclusion Definitions

We consider here how diversity and inclusion are measured and encouraged by research sponsors, as a starting point toward setting diversity goals for USC. We consider here the perspectives of the two largest sponsors of basic research in universities.

Definitions of Diversity from the NSF and the NIH

The National Science Foundation (NSF) and National Institutes of Health (NIH) support fundamental research at USC in the sciences, medicine and engineering. The NSF offers these definitions of diversity in its Diversity and Inclusion Strategic Plan:

Workforce diversity is defined as a collection of individual attributes that together help agencies pursue organizational objectives efficiently and effectively. These include, but are not limited to, characteristics such as national origin, language, race, color, disability, ethnicity, gender, age, religion, sexual orientation, gender identity, socioeconomic status, veteran status, educational background, and family structures. The concept also encompasses differences among people concerning where they are from and where they have lived and their differences of thought and life experiences.

Inclusion is defined as a culture that connects each employee to the organization; encourages collaboration, flexibility, and fairness; and leverages diversity throughout the organization so that all individuals are able to participate and contribute to their full potential.

In its Grant Proposal Guide, NSF further states:

NSF's mission calls for the broadening of opportunities and expanding participation of groups, organizations, and geographic regions that are underrepresented in STEM disciplines, which is essential to the health and vitality of science and engineering. NSF is committed to this principle of diversity and deems it central to the programs, projects, and activities it considers and supports.

NSF defines an under-represented minority as:

This category comprises three racial or ethnic minority groups (blacks, Hispanics, and American Indians or Alaska Natives) whose representation in S&E education or employment is smaller than their representation in the U.S. population.

The NIH has similar goals, and cites these aims for expanding diversity:

- Fosters scientific innovation and discovery
- Improves the quality of the research
- Enhances global competitiveness
- Increases the likelihood that research outcomes will benefit individuals from underserved or health disparity populations

- Increases participation of underserved or health disparity populations in clinical studies
- Expands public trust

Within its sponsored research programs, NIH further states:

NIH seeks to broaden participation by recruitment and outreach to individuals from groups shown to be nationally underrepresented in the biomedical, clinical, behavioral and social sciences, which includes: individuals from underrepresented racial and ethnic groups, individuals with disabilities, and individuals from disadvantaged backgrounds. Women may also be considered underrepresented for the purposes of programs that address faculty recruitment, appointment, retention or advancement.

And, within Diversity Matters (<https://extramural-diversity.nih.gov/diversity-matters>):

NIH recognizes that education and research opportunities may not be available to all, and as a result, some groups are underrepresented in health-related sciences on a national basis when compared to their peers among science-baccalaureate earners, among science-PhD earners, and in the biomedical workforce.

One issue that is emphasized more by NIH than NSF is inclusion of diverse subjects in clinical research studies. The NIH Policy and Guidelines on the Inclusion of Women and Minorities as Subjects in Clinical Research states:

It is the policy of NIH that women and members of minority groups and their subpopulations must be included in all NIH-funded clinical research, unless a clear and compelling rationale and justification establishes to the satisfaction of the relevant Institute/Center Director that inclusion is inappropriate with respect to the health of the subjects or the purpose of the research.

Aspects of Diversity Not Reflected in Federal Reporting

It is notable that our major research sponsors distinguish minorities from under-represented minorities, and distinguish the U.S. population from the population at large. It is also notable that some aspects of diversity and inclusion are not widely measured and reported, including:

- Sexual/gender orientation
- Diversity among international students, and through inclusion of international students
- Economic disadvantage and those who come from challenging life circumstances
- First generation students
- Students who are also parents
- Older non-traditional students
- People with disabilities

Just because an aspect of diversity is not reported to the federal government does not mean that it is unimportant to USC.

Diversity and Inclusion Aims for Research and Scholarship at USC

In its academic year 2017 meetings, the University Research Committee discussed and debated the many aims of diversity in research and along with the ways that diversity might be measured. Specific aims include:

- Creating opportunities for economic and ethnic groups in the United States that have traditionally lacked access to education opportunities in research universities, and the jobs that result from these opportunities.
- Expanding a culture of diversity and inclusion within the university, so that students, faculty, and staff benefit from a diversity of perspectives and backgrounds, whether or not they qualify as an under-represented minority.
- Increasing our success in obtaining external funding that rewards and encourages diversity and inclusion through demonstrated success.
- Recognizing that what constitutes an under-represented minority depends on the field, and therefore diversity and inclusion goals may differ among topics or disciplines.
- Continuing USC's tradition of welcoming international students, including those from countries with different compositions, with respect to ethnicity, gender orientation, wealth, religious affiliations, or political leanings.
- Setting targets for diversity that exceed those of other highly ranked private research universities, and reflects the diversity of the region in which we are located.
- Conducting research that is recognized as outstanding because we are able to study the needs of diverse groups that comprise our society, and because the research is informed by diverse perspectives providing a more holistic approach to solving the world's problems.

These aims go beyond those of our sponsors and more specifically reflect USC's unique position to advance diversity and inclusion broadly as a global research university situated in the megacity of Los Angeles.

We also recognize that studies have found that diverse research groups are capable of producing more impactful and significant research. By providing a culture at USC where the perspectives arising from a diversity of experiences infuses research -- through open and honest debate and discussion -- we seek to produce research that is exceptional for its relevance, innovation and accuracy. Success toward this goal not only depends on recruiting and retaining diverse students, staff and faculty, but also facilitating dialogue within research groups, departments, centers, schools and the university as a whole.

Lastly, we seek to leverage existing areas of exceptional research strength at USC toward diversity aims. For instance, USC is recognized for the exceptional size and impact of its computer science programs. Coupling diversity with computer science, or diversity with work on neurodegenerative disease, preventive medicine, social work, health economics and other areas or strength can magnify the impact of our efforts toward diversity and inclusion in research and scholarship.

Organization of Research at USC

Research at USC results from the creative energies of our students, staff, and especially faculty. We are motivated by curiosity, the need to solve problems, and opportunities to improve society and the environment. We seek innovative discovery, analysis and thought. We produce research in a culture that rewards transparency and sharing of knowledge and information, and encourages open discourse and debate among people with diverse perspectives and backgrounds. All of our 18 schools and the Dornsife College engage in research and scholarship, often working with each other in collaborative projects.

As USC approaches diversity and inclusion in research, it is essential for us to acknowledge that success depends on the cooperative efforts of many people and many organizations within and outside the university. We depend on our joint efforts and recognition that diversity and inclusion is a priority and a source of strength for the university.

Conducting Research at USC

USC is a decentralized institution where research and scholarship thrives within departments and schools. But we also encourage collaboration among faculty, staff, and students working in the same and in different disciplines. Sometimes these disciplines come together in a building designed to facilitate collaboration, such as the Michelson Center or Dauterive Hall, or a mission driven research center, such as the Institute for Creative Technology, the Norris Comprehensive Cancer Center, or the Center for Dark Energy Biosphere Investigations. Sometimes collaboration occurs through digitally enabled interactions that occur over a distance, perhaps spanning our campuses or working with other institutions.

Research is enabled by funding from external sponsors, most often from agencies of the federal government, but also from industry, state and local government, foundations, and other not-for-profit organizations. Our sponsored research carries obligations to perform according to the commitments expressed in our research awards, satisfying regulations and contractual terms. The funding we receive pays costs for conducting research – such as salaries and benefits for students and postdoctoral scholars. Funding also stimulates collaboration, as the most competitive and innovative projects require teams of researchers offering complementary skills and points of view. USC believes that diversity is crucial for capturing the rich perspectives and various competencies needed for a full examination of the world's challenges.

USC is an institution where research occurs in many places. The largest concentration of funded research (nearly 40% of the total) is on the Health Sciences Campus, led by the Keck School of Medicine. About 35% of our funding is focused on the University Park Campus (led by the Dornsife College and the Viterbi School of Engineering), and the remainder is spread among

three large off-campus institutes: Information Sciences Institute in Marina del Rey, Institute for Creative Technologies in Playa Vista and Alzheimer’s Therapeutic Research Institute in San Diego. USC also conducts research through its partner institution, Children’s Hospital of Los Angeles.

Research and scholarship at USC occurs in many forms:



“Wet” Laboratory Research:
Scientific research, such as biology and chemistry.



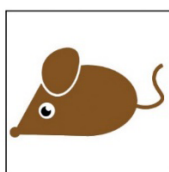
Field Research:
Where data are collected outside of the laboratory environment, working in the community, in fields like social work, or perhaps at remote locations, in fields like earth sciences or anthropology.



“Dry” Laboratory Research:
Also scientific research, but typically focused on computational studies or data analyses, or through use of other equipment that can be placed in office spaces.



Human Subject:
Where individuals are recruited and consented to participate in studies, which may be behavioral (e.g., psychology) or clinical (e.g., medicine) in nature.



Animal Research:
Most commonly through use of small rodents, and sometimes conducting pre-clinical studies that may lead to human testing of therapeutic agents.



Humanistic:
In fields like history, arts or languages, where scholars study and interpret texts or other human expressions, often through libraries, physical or virtual.

USC values diversity and inclusion in all of these endeavors. Though the need for diversity may seem obvious and imperative in community centered field research, it is also important in less obvious areas, such as laboratory research and animal research. In all cases, diversity of perspectives and backgrounds informs our research. However, we recognize that participation by diverse ethnic groups, genders and economic backgrounds varies from discipline to discipline, and therefore each discipline must define for itself the challenges it must overcome in achieving diversity and inclusion within the field.

USC’s research is supported through administrative and ethics programs, as well as facilities. At the central level, services include Contracts and Grants, licensing and patenting (Stevens Center), human subject protection, animal resource and animal protection, and Sponsored Projects Accounting, most falling within the Provost’s Office of Research. At the school level, support includes administrators who prepare budgets, manage accounts, and act as research coordinators on clinical trials or support personnel processes. Collectively, 500 – 1000 staff serve in an administrative role supporting research. Achieving diversity and providing opportunities for inclusion in these important staff positions, particularly in areas of leadership, is therefore an important goal.

Advancing Diverse Research Participation at USC through: Recruitment, Mentorship Training and Retention

Research and education support each other at USC in many ways. This includes formal classroom education for academic credit; mentored learning-experiences; on-line education, through for-credit courses or to learn particular skills or procedures; and placements in community organizations or through internships for professional advancement. Students are sometimes paid or received tuition remission in exchange for the work they do on research. In this capacity, they may be employed as student workers, graduate research assistants, or postdoctoral scholars. Staff and faculty may also acquire new skills through focused not-for-credit training, or sometimes enroll in degree programs that advance their research skills.

Recruitment entails creation of policies, programs, and resources that make USC an attractive place to study and work for people from diverse backgrounds and experiences. The university must reach out to people and places that provide diverse pipelines to USC, so that potential students, faculty, and staff are aware of what USC has to offer. It requires actively encouraging students, staff, and faculty candidates to accept the opportunities we provide, and making all efforts to meet reasonable requests for resources that could enhance their success at USC.

Mentorship entails guidance for our students, faculty, and staff to succeed and prosper. As stated in USC's Research Committee's report on research mentorship for faculty:

"A mentor should provide tangible help to the mentee, offering to provide constructive feedback on draft papers and proposals, introducing the mentee to funding agency program managers, recommending them to serve on review panels, nominating them for awards, etc."

Although USC has made such mentorship a priority, it is important for us to focus on assuring that individuals from under-represented groups receive advice that takes into account their life experience, cultural background, religious beliefs, and different categories of identity, to name a few characteristics that play into our work lives. It is equally important for mentors to not make assumptions about a mentee's background or belief based on any known demographic characteristic. The relationship should unfold with the mentor communicating their support for diverse experience and perspectives, and with the mentee communicating their needs to the mentor over time as trust develops.

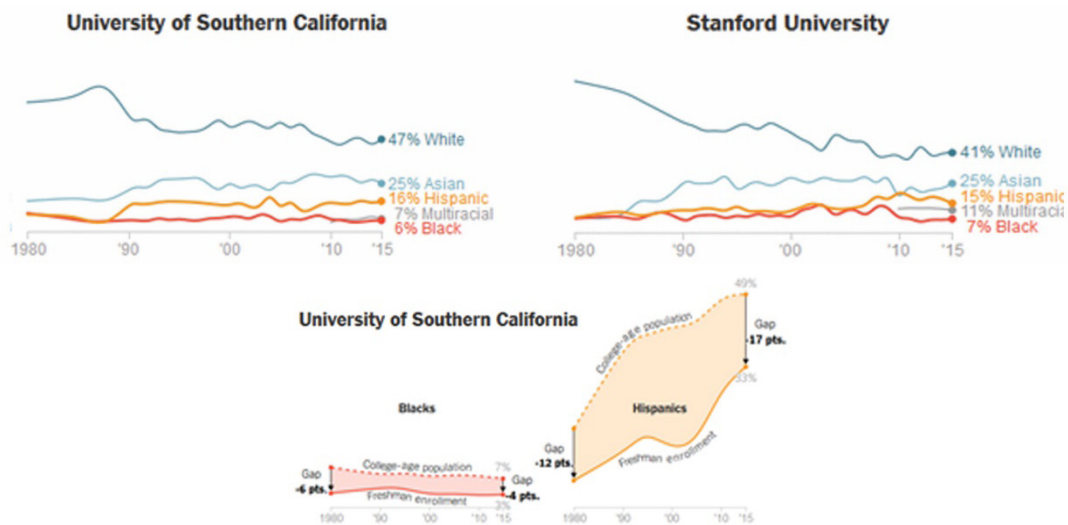
Training programs build on mentorship, providing the tools that facilitate learning opportunities and professional growth, supporting faculty, staff and students to achieve their development goals. Training programs and workshops, such as those offered by the Center for Excellence in Research, are also designed to increase and impact and prominence of scholarship research throughout the university.

Retention extends the goals of recruitment throughout careers and programs of study at USC. We wish to create a culture that motivates students, faculty and staff to stay at USC because they are able to achieve excellence in their research and scholarship, because they can conduct research in an environment that encourages diverse backgrounds and points of view, and because their research serves diverse communities and helps understand the challenges faced by under-represented groups.

This section describes some of the available programs to advance diverse participation in research and scholarship at the levels of students (undergraduates, graduate students, and postdoctoral scholars), faculty, and staff, setting the foundation from which we might improve.

UNDERGRADUATE STUDENTS

Nearly 20 percent of the 2016 incoming freshman class come from underrepresented minority groups, and overall 29% of undergraduates were Hispanic, black or multiracial in 2015; 13 percent of incoming students were first-generation college students in 2016. The figures below from the New York Times Upshot column compare these statistics to Stanford University, which has similar percentages, except for a higher percentage of multi-racial students. Though the percentage of black students at USC is similar to that of California as a whole, USC lags well behind the Hispanic population of the state. This is apparent in the figures showing minority population for the state relative to that of UC campuses. Hispanics constitute nearly half of the state’s college age population, whereas 15% of USC’s undergraduates are Hispanic.



Beyond the overall composition of our student body, USC specifically seeks to engage undergraduates from all backgrounds in research. Unfortunately, some minority and first-generation students may lack awareness of research opportunities and benefits, as well as lack critical support networks. They may also face unique financial, social, and academic challenges due to economic constraints and systemic inequities. To address these needs, a number of programs at USC support the success of this student population and their access to the research experience (see the Appendices).

GRADUATE STUDENTS

USC provides rigorous, intellectually challenging, and stimulating research experiences and classroom environments to its graduate students. Working closely with our faculty, programs targeting under-represented students provide opportunities to gain research experience in labs and to conduct research in the community and in the field. Initiatives such as the *Graduate Initiative for Diversity, Inclusion and Access* aim to increase diversity in graduate and doctoral programs with stipends and boot camp workshops. Example programs are provided in the Appendices.

POSTGRADUATE SCHOLARS

With over 650 postdoctoral scholars, USC's Office of Postdoctoral Affairs works closely with academic units to help recruit a diverse cadre of the best junior scholars to the university and facilitates the training and preparation of postdoctoral scholars for careers as independent researchers, academics, and leaders of their chosen fields. The office supports a number of programs, listed in the Appendices.

FACULTY

Diversity in research can enhance the creativity of our faculty through a culture of transformative scholarship. USC has promoted increasing diversity among its outstanding faculty and expanded the pool of faculty who conduct research in diversity-related fields. This occurs through recruitment, retention, and mentoring.

Each school and several central university units have instituted mentoring programs and activities to foster the success of faculty, as well as initiatives related to faculty diversity in recruitment and retention. Deans of Faculty Affairs also serve as points of contact within each school to assist faculty at all levels in providing support for development and mentoring as well as guidance for appointment, tenure, and promotion. They also advise department chairs and administrative offices on procedures regarding recruitment of new faculty, compensation and leaves of absence. Additional resources for supporting research described in later sections as well as in the Appendices.

STAFF

USC's staff support all aspects of research administration and advancement and serve as liaison between faculty, students, departments, and the various institutional offices integral to the administration of research programs and projects. The university offers a number of workshops and training courses (listed in the Appendices) that provide administrative research staff effective strategies to leverage and increase appreciation of the richness of the diversity at USC.

Responsive Research: Scholarly and Creative Programs

In addition to growing diversity among students, staff, and faculty, USC conducts research that serves the needs of diverse populations and helps improve our understanding of diverse individuals and diverse societies. We divide such scholarly and creative programs into three groups: (1) studying diversity, (2) inclusion of diverse individuals in clinical trials and human subject research, and (3) conducting research that engages diverse communities.

STUDYING DIVERSITY

By studying diversity, we recognize that quality research depends on sensitivity to diversity as a topic, which needs to be understood in the context of study design and interpretation of research results, as well as diversity as the specific focus of research investigations. Examples include our study of equitable treatment or access to opportunities of diverse populations, the role and effects of discrimination and bias in society, comparative health and educational outcomes, and evaluation of strategies for providing a more just society. One emerging opportunity for USC will be research on how algorithms, social media and other technologies may inherit and institutionalize biases in American society, but may also serve as mechanisms for enhancing diversity. The Appendices lists programs and centers within USC that examine diversity as a topic of research.

CLINICAL TRIALS AND HUMAN SUBJECTS RESEARCH

Given the diversity of the Los Angeles region, USC is in a unique position to contribute to the scientific understanding of how humans behave and respond to clinical interventions, depending on ethnicity, gender, financial well-being, and many other factors. Diversity is an emphasis in several schools as well as our major research centers and institutes, including the SC-Clinical and Translational Science Institute, the Norris Comprehensive Cancer Center, the Edward R. Roybal Institute on Aging, the Alzheimer's Therapeutic Research Institute, and many others, but can become a stronger strategic theme for all of our human subject research in the future. Example programs are listed in the Appendices.

SCHOLARLY AND CREATIVE PROGRAMS: CONDUCTING RESEARCH WITH DIVERSE COMMUNITIES

Our last point of scholarly and creative focus is community engaged research. Our goal here is to better serve the diverse communities that comprise Los Angeles through research that is not just recognized for its scientific impact, but also conduct research that has a measurable impact on the City of Los Angeles as well as other communities around the nation and the world. As one example, the School of Pharmacy partners with the Health Services Advisory Group - Right Care Initiative, which aims to improve clinical outcomes by catalyzing uptake

of patient-centered, evidence-based best practices among medical groups, clinics, and health plans. Beyond the City of Los Angeles, USC's extensive distance education programs in Social Work, Education and other fields provide research opportunities for students around the country. Additional programs are included in the Appendices.

Summary

USC's efforts to promote and expand diversity in research are decentralized and multi-faceted. Looking forward, we aim to increase our success through a coordinated strategy that links diversity among our student, staff and faculty populations with diversity in the research that we conduct. We seek to make these a distinctive feature of USC's research programs that leverages our unique location in the center of one of the most diverse cities in the world.

In addition, our review of programs and best practices at other universities has identified gaps in what we offer. These gaps include:

- Regular assessment of research climate, as perceived by faculty, students and staff, or by external stakeholders, such as community organizations or participants and trials.
- Coordinated programs to support engagement of under-represented minorities in research experiences and to recruit under-represented minorities to USC.
- Targeted promotion of opportunities for being hired by USC in a research position, particularly reaching out to minority serving institutions, and ensuring opportunities are posted and advertised.
- Broad coordinated outreach to encourage participation of underrepresented minorities in clinical trials and to support diverse communities.
- Promotion of USC strengths as a place for studying diverse populations internally or externally.

Mission-Based Diversity and Inclusion In Action

Our strategy to advance diversity and inclusion in research and scholarship focuses on six pillars of engagement: expanded participation among (1) faculty, (2) students, (3) staff; and responsive research (4) studying diversity, (5) conducting clinical trials and other human subject research, and (6) serving diverse communities. For each of these pillars, this section defines our goals, action plan and desired outcomes. Collectively, the plan aims to make USC a national leader in diversity and inclusion for research.

In the charts that follow:

- “URM” refers to underrepresented minorities.
- “D&I” refers to diversity and inclusion
- “REU” refers to research experience for undergraduate students
- “CER” refers to Center for Excellence in Research



Recruit, hire, promote and retain diverse research-active faculty and other researchers and scholars.

STRATEGIES

Goal 1: Increase success of diverse faculty in obtaining sponsored funding for research, particularly for centers, program project grants, honors and training grants through research advancement offices.

Action 1.1: Identify and support faculty teams in the submission of institutional training grants.

Action 1.2: Identify and promote D&I related research funding opportunities.

Action 1.3: Identify and support promising faculty for seeking major honorific awards.

Goal 2: Broaden faculty diversity among research active faculty through accountability.

Action 2.1: Consider candidate experience with D&I research or history of mentoring URM students or faculty.

Action 2.2: Identify specific URM individuals as potential recruits through posting of available positions in URM associations, as well as reaching out to URM institutions.

Action 2.3: Evaluate searches and hires to advance D&I, evaluating termination and voluntary resignation.

Action 2.4: Require training on implicit bias to faculty search committees.

Action 2.5: Conduct regular university-wide research climate survey that can be disaggregated at department and center level.

Goal 3: Align merit and reward review with USC's mission, including balancing the societal impact of research toward advancing diversity.

Action 3.1: Specify contributions toward D & I efforts as part of USC promotion and tenure manual.

Action 3.2: Recognize faculty members' time and effort working with URM undergraduates in research in promotion and tenure .

Action 3.3: Enhance efforts to retain highly valued faculty by ensuring that they have strong support for their research, teaching, and public engagement.

Goal 4: Build upon best practices for mentoring of diverse research faculty.

Action 4.1: Develop training materials to include diversity as a component of faculty mentoring.

Action 4.2: Identify and support faculty for leadership positions who are committed to promoting equity and inclusion.

Action 4.3: Offer interactive training opportunities on research culture to include supporting a diversity research culture as an element of improving research outcomes through the Center for Excellence in Research.

OUTCOMES

Outcome 1: Diversity of research-active faculty exceeds that of all other major private research universities.

Outcome 2: Grow number of institutional training and D&I-related research grants awarded to USC

Outcome 3: Grow number of minority and female faculty serving in positions of leadership for major research centers.

Outcome 4: Increase number of minority and female faculty receiving major research awards and elected to national academies.

Outcome 5: Demonstrate progress in research climate within departments and for the university as a whole.

Students & Postdocs



Recruit, train and graduate diverse students and postdoctoral scholars, so that they may become researchers, or may be informed by research methods in a wide range of future careers, making opportunities for conducting research broadly inclusive.

STRATEGIES

Goal 1: Expand URM participation in research by growing training grants from external sponsors.

Action 1.1: Educate graduate students, postdocs, and faculty mentors of minority supplements to grants to apply for additional funding.

Action 1.2: Expand funded research experiences for undergraduate URM in labs

Action 1.3: Assist diverse students in obtaining competitive individual graduate fellowships from NSF and NIH.

Action 1.4: Ensure that URM students are included in all NSF REU submissions.

Action 1.5: Support, seek and obtain major national awards to support under-represented participation, including INCLUDES and ADVANCE (NSF), MARC (NIH) and McNair Scholars.

Goal 2: Promote experiential equity for research to broad student audiences.

Action 2.1: Broadly advertise and promote all paid research positions for students and postdocs at USC as a precursor to extending offers, and actively recruit applicants broadly.

Action 2.2: Broadly advertise and promote doctoral programs at USC, in particular reaching out to minority serving institutions.

Action 2.3: Create an annual *USC Research Diversity Open House* to recruit URM undergraduates and showcase opportunities, in cooperation with student organizations.

Goal 3: Expand research training for undergraduates in research.

Action 3.1: Develop *Freshmen Research* for-credit course with research design experience.

Action 3.2: Create the *URM Undergraduate Research Award* to provide pilot funding to faculty for research projects that actively involve URM undergraduates.

Action 3.3: Provide travel grants for underrepresented students and postdocs to present posters or oral presentations at professional conferences

Action 3.4: Develop workshops for faculty and departments on how to include research opportunities for undergraduates in curriculum and classes, providing small research project grants to support this effort.

Action 3.5: Create research mentoring program working through first-generation student association, and expand first-generation research mentoring through all research disciplines.

Goal 4: Broaden participation in student research through accountability.

Action 4.1: Review PhD data on recruitment and progress to degree of URM students with deans and vice deans yearly, and institute review with individual chairs through Vice Provost for Graduate Programs.

Action 4.2: Implement survey of research climate, administered to faculty, students and staff to determine avenues for improvement at departmental level.

Action 4.3: Ensure postdoc job advertisements include a statement on USC's commitment to D&I.

Action 4.4: Conduct university-wide research climate survey that can be disaggregated at the department and center level.

Goal 5: Build upon best practices for mentoring of students and postdocs.

Action 5.1: Create a website to centralize information regarding existing undergraduate and graduate student programs to match students with research faculty.

Action 5.2: Encourage Schools to organize "Diversity Mixers" to promote inclusiveness for all students from URM backgrounds.

Action 5.3: Create network of professors and students who are committed to mentoring under-represented students and first-generation students to expand awareness of research opportunities.

OUTCOMES

Outcome 1: Diversity of research-active students and postdocs exceeds those of all other major private research universities.

Outcome 2: Increase fellowship top-offs provided by each PhD Program.

Outcome 3: Grow the number of training and/or Career Development grant awards from federal sponsors aimed at enhancing the number of URM researchers or scholars who are well-prepared for research careers.

Outcome 4: Demonstrate progress in research climate survey within groups, departments, centers, schools and for the university as a whole.



Recruit, hire, promote and retain diverse staff supporting research in the capacity of research administration and advancement .

STRATEGIES

Goal 1: Adopt practices and policies that increase diversity and cultural competency skills in research staff.

Action 1.1: Consider participation in D&I efforts in staff reviews and promotions.

Action 1.2: Establish clear expectations, qualifications, and competencies for research administrators and train diverse individuals to serve in these roles.

Action 1.3: Revise staff performance evaluation templates and staff self-assessment forms to include an assessment of diversity and cultural competency skills.

Goal 2: Broaden student and postdoc diversity among researchers at USC through accountability.

Action 2.1: Assure job advertisements for staff appear in job sites that reach URM, including those that focus on research staff positions.

Action 2.2: Track retention of highly qualified staff in valued positions supporting diversity.

Goal 3: Expand and enhance supervisory and leadership competency in diversity, equity and inclusion for research managers, supervisors and directors.

Action 3.1: Create a diversity training program for research staff and faculty.

Action 3.2: Promote staff who exhibit diversity and cultural competency skills to leadership positions.

Goal 4: Build upon best practices for mentoring of diverse research staff.

Action 4.1: Develop training materials to include diversity as a component of research staff mentoring.

Action 4.2: Require staff to participate in diversity-focused training.

OUTCOMES

Outcome 1: Demonstrate progress in research climate survey within departments and for the university as a whole.

Outcome 2: Grow number of staff position job advertisements in job sites targeting URM.

Outcome 3: Achieved 100% participation of staff in diversity training.

Responsive Research – Studying Diversity & Inclusion



Investigate the role of diversity and inclusion in society along with the opportunities and barriers to success today, in the past and in the future.

STRATEGIES

Goal 1: Conduct research that is recognized as outstanding because we study the needs of diverse groups, and because the research is informed by diverse perspectives.

Action 1.1: Provide funds to support faculty with creative diversity-related research proposals.

Action 1.2: Expand training programs for faculty on conducting research with diverse populations through CER.

Action 1.3: Collaborate with minority serving institutions and with community organizations to collectively support submissions of center proposals to NSF, NIH and other institutions.

Action 1.4: Create focused research programs on biases in algorithms, social media and technology, and health disparities.

Goal 2: Increase success in obtaining external funding for research studying diversity.

Action 2.1: Support pilot research and scholarship for faculty who plan to conduct research that advances knowledge on equity, diversity, and inclusion (Zumberge D&I award).

Action 2.2: Support retreats among faculty interested in research and interventions in areas where perspectives or populations have been marginalized or under represented.

Action 2.3: Apply for NSF research calls focused on increasing diversity in STEM, studying engineering education, and career pathways in STEM

Action 2.4: Support and incentivize faculty who apply for research calls focused on diversity

Goal 3: Promote and recognize excellence in diversity scholarship.

Action 3.1: Create the Associates Award for Diversity Scholarship, honoring faculty who have contributed to a greater understanding of groups that have been traditionally under-studied.

Action 3.2: Develop a diversity in research conference to highlight research, individuals, and diversity and inclusion (in a new theme each year) for a day-long event.

Action 3.3: Develop a Provost Diversity in Research Speaker Series to promote intellectually rewarding cross-department, cross-college, or interdisciplinary collaborations among faculty who work with diversity-related research.

OUTCOMES

Outcome 1: Grow number of grant awards that investigate unique aspects of diverse populations.

Outcome 2: Increase number of research collaborations with URM community-based groups, agencies and other entities.

Outcome 3: Grow the number of research collaborations with minority serving institutions and with community organizations.

Clinical Trials & Other Human Subjects Research



Engage diverse communities and individuals to participate as subjects in our research and contribute biological samples, so that the research findings reflect any unique aspects of diverse populations.

STRATEGIES

Goal 1: Ensure diversity of IRB membership.

Action 1.1: Invest in specialized training for Institutional Review Boards (IRB) and health professionals.

Action 1.2: Measure and track IRB diversity and actively recruit URM to obtain broad representation.

Goal 2: Enhance awareness about clinical trials at USC among diverse populations.

Action 2.1: Connect with and learn from healthcare navigators, Promotoras, and Research Coordinators who do outreach about healthcare and research in local communities.

Action 2.2: Create a community “recruitment and retention” committee to promote diversity

Action 2.3: Implement digital scholarship approaches that reflect access to technology in the recruitment and retention of URM participants.

Goal 3: Make diversity a strategic asset of USC, engaging partner institutions to reach out to diverse populations

Action 3.1: Support methods and measures to ensure meaningful community participation throughout the clinical trial process.

Action 3.2: Utilize Clinical and Translational Institute to reach out to diverse communities for clinical trial participation.

Goal 4: Assure investigators and study staff are aware of federal requirements for inclusion of women and minorities in human subjects research and sexes in animal research

Action 4.1: Develop training course for researchers engaged in clinical trials or human subject research on specific NIH grant application diversity requirements, and for animal researchers on sex requirements.

Action 4.2: Train investigators in culturally-sensitive trial design and multi-lingual study instruments

OUTCOMES

Outcome 1: Obtain national leadership in minority participation as subjects in clinical trials.

Outcome 2: URM membership in IRB board representation reflects diversity of university and local community population.

Outcome 3: Create a biorepository of diverse patient samples (e.g. tissue, blood, urine) and model systems (e.g. cell lines, patient-derived xenografts) for investigators to help develop new therapies that benefit diverse populations.

Research with Diverse Communities



Conduct research that is informed by and serves the needs of diverse communities.

STRATEGIES

Goal 1: Grow the number of research centers that have strong community engagement and benefit diverse communities.

Action 1.1: Support and enable enhanced strategic and lasting partnerships between research programs and community-based extension and outreach.

Action 1.2: Utilize social entrepreneurship and innovation programs at USC to develop community centered programs.

Action 1.3: Identify service learning opportunities across the university focused on underrepresented populations.

Goal 2: Communicate broadly and continuously USC's principles of excellence, equity, diversity & inclusion engagement with regular updates to outside communities.

Action 2.1: Collaborate between Office of Research and Community Relations to identify and promote exemplar programs.

Action 2.2: Leverage the USC STEM Consortium and other Collaboration Fund groups to expand and participate in innovation and entrepreneurship.

Action 2.3: Identify USC neighborhood learning needs (in K-12, community organizations) and opportunities with foci on supporting URM historically underrepresented in STEM.

Goal 3: Develop and implement new community-based mechanisms to understand the needs of communities for research.

Action 3.1: Promote networking events on the topic of community engagement between USC researchers, community organizations, and local individuals

Action 3.2: Develop rigorous, systematic evaluations of all outreach programs and to assess needs of surrounding communities.

Action 3.3: Leverage distance education programs to develop community focused research programs around the United States.

OUTCOMES

Outcome 1: Grow number of awards funding collaborative research projects that serve the needs of URM community organizations.

Outcome 2: Grow the number of strategic collaborations with minority-serving organizations, such as USC+LAC hospital, HBCUs, Minority-Serving Institutions and/or local community organizations.

Creating an Inclusive Environment

Strategies to increase diversity, inclusion and equity at USC and its surrounding community will be executed from the ground up (research groups, departments and centers) and from the institution (central university offices and dean offices). Our success will depend on creating a culture that values diversity in all of its forms and all levels as a strategic university asset and working cooperatively across the entire university.

Given that USC is distributed across multiple campuses, centers, and schools, with research projects taking place both on our campuses and at remote locations, our execution depends on creating a culture that overcomes distance. With these considerations in mind, we will utilize the following approaches to achieve an inclusive environment at USC:

Structures, Processes and Programming

The Office of Research will appoint the Director of Faculty Research Relations as Diversity Officer for Research and Scholarship. To facilitate diversity activities, she will work with a standing advisory council, appointed by the Vice President of Research, and drawn from faculty committed to advancing diversity in the research and scholarship, and representative of the six goals articulated in Section 4. In addition, the diversity officer will meet regularly with school diversity officers, and school research deans, to coordinate activities across the entire university. We will develop programming centrally through the Office of Research, the Vice Provost for Undergraduate Programs, the Dean of the Graduate School, and the Postdoctoral Affairs Office. Central academic activities will be complemented by the efforts in schools, as well as major research centers, such as the Clinical and Translational Science Institute and the Norris Comprehensive Cancer Center (inclusive clinical trials and community programs). In addition, the Office of Research will collaborate with Community Relations to facilitate research partnerships.

Within the Office of Research:

- **Office for Protection of Research Subjects** will support inclusion of diverse populations in human subject studies and engagement of diverse community organizations.
- **Center for Excellence in Research** will develop diversity related training for faculty and postdocs.
- **DC Office of Research Advancement** will support faculty in obtaining research funding from federal agencies in support of diversity efforts..
- **Central Office** will provide internal funding programs to support pilot diversity research, and work to expand the diversity of recipients of all of its funding programs.
- **Department of Contracts and Grants** will develop training for research administrators to support diversity aims.

- **Stevens Center for Innovation** will engage diverse faculty and other researchers to diversify the population of inventors at USC.
- **Animal Resources** will support faculty in assuring standards for sex diversity among subject animal populations.

Separately, schools will work to expand diversity within their units through all six pillars, but in particular through student programs, faculty recruitment and retention, and staff recruitment and retention.

The Graduate School will support expanded diversity among doctoral students at USC, the Undergraduate Office will develop new opportunities for undergraduate students, and the Postgraduate Office will do the same for postdocs.

Evaluating Impact

The Office of Research will evaluate impact in several ways, as discussed in Section 4:

- Surveys of research climate among students, faculty and staff
- Quantification of diversity themed research projects and research centers
- Recognition of scholarly activity among diverse faculty
- Measurement of diversity among clinical trial subjects
- Tracking community engagement in research projects

We will work to identify areas of success within the university and areas where progress is needed as well, along with promoting effective practices.

Phased Planning and Execution

As a first step, the Office of Research initiated a diversity grant under the Zumberge program in the fall of 2017. We are organizing a community research event that will take place in spring 2018, which will become an annual event, and have launched a diversity series within CER for spring of 2018. Upon completion of this plan, we will launch our advisory committee and develop a webpage to compile resources on diversity in research and scholarship. We intend to initiate a research climate survey in academic year 2018. Other programs are intended to launch in academic year as funding becomes available.

Space and Time for Open Dialogue

Though dialogue will occur within our committees and events that we organize, our intent is to assure that USC builds a culture that supports diverse perspectives and diverse backgrounds throughout our research and scholarly activities. It will be essential to respect diversity and inclusion within laboratories and research groups, centers and institutes and academic departments, and not just through institutional commitment at the school or university level. From the Office of Research, we will develop a communication program to convey research practices that support open dialogue as well as training materials. We will also track activities occurring throughout the university to highlight and recognize successes

Fundraising

Fundraising entails seeking support from private donors, foundations, corporations and governmental agencies, many of which have established programs targeted at increasing and studying diversity. USC must make success in these fundraising endeavors a strategic priority within its advancement offices.

The DC Office of Research Advancement will prioritize success in major federal diversity initiatives, to include:

- The National Institutes of Health (NIH) funded “Research Initiative for Scientific Enhancement (RISE),” focused on ways to enhance the biomedical research workforce.
- National Institute on Minority Health and Health Disparities (NIMHD), which encourages investigators to conduct specialized research aimed at improving the health of disadvantaged populations and communities.
- The NIH funded “Career Development Award to Promote Faculty Diversity in Biomedical Research,” invites investigators from diverse backgrounds underrepresented in research. It targets individuals with basic, clinical, and translational research interests in cardiovascular, pulmonary and hematologic diseases in both the general and health disparities populations.
- The National Institute of Diabetes and Digestive Kidney Disease (NIDDK) initiative “Partnerships with Professional Societies to Enhance Scientific Workforce Diversity and Promote Scientific Leadership,” meant to enhance the diversity of the clinical, behavioral, and biomedical research workforce.
- The National Institute of Dental and Craniofacial Research (NIDCR) funded “Mentored Career Development Award to Promote Diversity in the Dental, Oral and Craniofacial Research Workforce,” which provides research experience for those who are underrepresented in the basic and clinical biomedical, behavioral and social sciences.
- The NIH “Research Education: Initiative for Maximizing Student Development (IMSD) Program” supports educational research activities that will enhance the diversity of the biomedical, behavioral, and clinical research workforce.
- The NIH “Building Infrastructure Leading to Diversity (BUILD) Initiative”, which aims to support undergraduate students interested in research who come from underrepresented and diverse populations, and enhance the diversity of well-trained biomedical research scientists.

- The NIH funded “Ruth L. Kirschstein National Research Service Award (NRSA) Individual Predoctoral Fellowship to Promote Diversity in Health-Related Research, which supports the research training of predoctoral students from underrepresented population groups in the research workforce, including underrepresented racial and ethnic groups and those with disabilities.
- The National Science Foundation (NSF) funded “ADVANCE: Increasing the Participation and Advancement of Women in academic Science and Engineering Careers” program, which promotes increased diversity in the science and engineering workforces.
- The NSF funded “Inclusion across the Nation of Communities of Learners of Underrepresented Discoverers in Engineering and Science (INCLUDE)” program, is an effort that promotes participation and leadership of minority investigators, with a goal of transforming research to become more inclusive
- The NSF alliance-based program, “Louis Stokes Alliances for Minority Participation (LSAMP)”, which has the goal of assisting universities and colleges in diversifying the nation’s science, technology, engineering, and mathematics (STEM) workforce.
- The NSF’s “Improving Undergraduate STEM Education: Pathways into Geosciences (GEOPATHS)” program, which broadens the participation of individuals and institutions in STEM fields, targeting young individuals of diverse backgrounds interested in research.

Public Posting of Diversity and Inclusion Plan

This plan for diversity and inclusion in research and scholarship is a living public document. It will be retained in a research diversity webpage, within the USC research website (research.usc.edu), and provide supplemental resources that support our action plan. The website will also cross-reference research components on school diversity and inclusion plans.

The website will include a discussion board, inviting input from the university community on how to improve diversity in research and scholarship. This input, along with tracking of diversity metrics, will guide annual revisions to the plan.

Lastly, upon formal adoption, we will distribute the plan to all faculty, as well as research deans and research administrators, to increase awareness of the strategies and priorities stated herein.

Appendices

Programs Supporting Research Diversity at USC

Within these appendices, we provide examples of existing programs at USC that support diversity and scholarship in research, as a foundation toward future efforts.

UNDERGRADUATE STUDENTS

Gateway Scholars provides research training, academic skills building workshops/seminars, other research-related opportunities, and scholarships to high-achieving undergraduates from first-generation college backgrounds, low-income households, and historically underrepresented minority communities. Scholars are awarded a \$2,800 stipend to support a full-time summer research agenda throughout the summer while working in collaboration with a USC faculty mentor.

USC Keck School of Medicine Bridging the Gap Summer Research Program exposes outstanding minority students to research, aiming to attract under-represented minority students to medicine and the biological sciences. Students receive a stipend, roundtrip transportation from home, university housing, and conduct summer research for eight weeks in the laboratories of Keck faculty, who serve as mentors; they attend weekly seminars on health disparities, receive formal instruction in basic physiology and biostatistics, and present their findings to the Keck community.

USC School of Pharmacy Summer Undergraduate Research Fund (SURF) provides learning and networking opportunities for undergraduate students committed to pursuing either a professional or academic research career in pharmaceutical or translational sciences. Applications are strongly encouraged from first-generation college students and groups underrepresented in graduate education. In addition to daily engagement in the lab, students attend biweekly seminars and participate in a workshops on the graduate school application process, as well as present their research to peers and faculty.

USC Dornsife Student Opportunities for Academic Research (SOAR) funds undergraduates for participation as a research assistant in a faculty member's project, connecting students with faculty members and introducing them, early in their academic careers, to the process of serious scholarly inquiry, fostering valuable relationships between students and faculty. SOAR is for research during the fall and spring semesters of the academic year.

C-DEBI - Genomics and Geology Undergraduate Research Experience (GGURE) is an undergraduate research internship program that offers students the opportunity to participate in a research group and conduct research with a faculty mentor. Underrepresented students are strongly encouraged to apply. The program provides paid positions in the summer and academic year. The emphasis is in STEM fields (including life science, earth and marine science, computational science, and engineering).

DIA Jumpstart Program supports students from three minority-serving institutions – California State Polytechnic University, Pomona; California State University, Los Angeles; and Loyola Marymount University – to preview the PhD experience through a research-intensive summer program at USC. Participants are matched with USC faculty mentors to act as summer research assistants. This experience is supplemented by training on PhD admissions, research ethics, and skill development.

Science, Technology, and Research (STARS) & Engineering for Health Academy (EHA) Programs: USC faculty promote research education and enhance URM student pipeline from high school to college by mentoring students from the neighborhood Bravo Medical Magnet School (\cong 70% of the student population is Hispanic); students are placed in science labs in the summer following junior year and return as seniors to work throughout the school year.

Center for Engineering Diversity (CED) assists the Viterbi School of Engineering in the recruitment, retention and graduation URM students (African-American, Latino, Native American, and female) pursuing engineering degrees, providing a supportive environment that prepares students academically, professionally, and personally for success as professional and academic engineers.

Center for Enrollment Research, Policy, and Practice (CERPP) researches admission and enrollment and fosters equity in college access, admission and outcomes. During the 2016-17 academic year, this program positioned 37 first generation college graduates in 36 high needs schools in Los Angeles as peer advisers, resulting in 14,269 college acceptances.

Center for Education, Identity and Social Justice (CEIDSJ) fosters productive and meaningful interaction among students, educators and members of the community by examining how multiple identities (race, ethnicity, gender, sexual orientation, religion, and disability) meet to create shared values and contribute to the ideals of democracy.

Predocutorial Institute for First-generation and Diverse Scholars (POIR): Two-day summer program to increase pathways toward a Ph.D. in the social sciences for first-generation students and students of color. Participants learn to develop skills toward crafting their Ph.D. applications, and are encouraged to pursue research opportunities at USC with POIR faculty and to apply to USC Ph.D. programs.

The Security and Political Economy (SPEC) Lab conducts interdisciplinary, policy-relevant research on issues at the intersection of climate change, security, and economic development. These research projects provide opportunities for undergraduate students to develop data science and other research skills. The lab focuses on recruiting and serving female, minority, and first generation students.

SURF and SHURE mentors students one-on-one in research in conjunction with Dornsife faculty members during the summer, introducing students early in their academic careers to the process of scholarly inquiry.

The Mellon Mays Undergraduate Fellowship program addresses underrepresentation by increasing the number of students from underrepresented minority groups who pursue PhDs and by supporting the pursuit of PhDs by students who may not come from traditional minority groups but have otherwise demonstrated a commitment to the goals of MMUF.

USC Viterbi Summer Coding Camp (“CS&SC”) teaches 80-150 elementary and middle school students from under-represented group how to code each year. The aim is to inspire pre-college students to explore computer science with an eye toward careers as technology professionals, problem solvers and innovators. The students receive instruction from computer science PhD students who have are trained to interact with elementary and middle school students.

USC Young Researchers Program brings motivated local inner-city public school students to USC to do hands-on research under the guidance of faculty and graduate students. Through their experience working in USC labs as well as through workshops designed to introduce students to university-level science, students gain scientific and communication skills, confidence in their ability to succeed at an advanced level, a better understanding of current research in the sciences, and information and connections to help them attend college and pursue careers in science.

GRADUATE STUDENTS

DIA Boot Camp is a writing-intensive 10-day workshop for incoming and first-year PhD students applying for Ford Pre-Doctoral, GEM, Soros, NSF GRFP, and other major external and research fellowships. Participants will receive stipends and supplemental research awards based on specific performance goals.

Programs in Biomedical and Biological Sciences (PIBBS) recruits under-represented minority students, providing the entry portal to PhD programs at the Keck School of Medicine. Targeted fellowships for talented URM students has helped increase their representation, with URM students comprising 25% of the 2016-17 incoming class.

Suzanne Dworak-Peck School of Social Work provides Summer Fellowships to PhD and masters students to develop individual research projects and to attend and present at research conferences. The *Research Council Pilot Study Program* and *Mini Research Fellowships* match doctoral and masters-level graduate students with research faculty and provide the opportunity to lead pilot research studies.

POST-GRADUATE STUDENTS

The Provost's Postdoctoral Scholars Program for Faculty Diversity Program enhances the diversity of postdoctoral scholars and builds a pool of exceptional underrepresented minority candidates for the next generation of faculty. These scholars link the expertise of USC faculty and doctoral students with the knowledge and experience gained through their own research. Appointments are for up to two years (\$50,000 per year salary plus fringe benefits, with a research and travel account of \$5,000 per year).

USC-CONACYT Postdoctoral Scholars Program: In collaboration with Mexico's National Council of Science and Technology (CONACYT), this joint program provides postdoctoral scholars from Mexico with 1-2 year postdoctoral fellowships in fields related to science, technology, and innovation. The fellows receive a salary of up to \$60,000 per year in addition to \$8,000 USD towards a comprehensive benefits package.

FACULTY

Provost's Diversity and Inclusion Council, spearheaded by the Provost's Office to address foundational changes to improve the campus climate at USC, one of the charges of the Diversity and Inclusion Council (previously known as the Diversity Task Force) is to provide recommendations to the provost to improve recruitment, retention, support, and climate for a diverse and inclusive faculty, student body, and university staff.

Women in Science and Engineering (WISE) increases the representation and success of women faculty members in science and engineering at USC through a number of programs that enable women to thrive in their careers by developing university policies and building a supportive university environment.

UCAPT workshops: The Office of the Vice Provost for Academic and Faculty Affairs, in conjunction with the University Committee on Appointments, Promotion, and Tenure, hosts a number of workshops for faculty each academic year to provide transparency and guidance on the tenure process.

Center for Excellence in Research within the Office of Research provides training for faculty on obtaining research funding and on novel approaches to conducting research, including diversifying research programs.

STAFF

Recruitment Lab: Summer Series - Non-Discrimination in Recruitment and Hiring: Training workshops for staff on Equity & Diversity and addressing legal requirements in hiring and recruiting. Session includes strategies for exercising sound judgment and avoiding discrimination in the hiring process and guarding against bias in the recruitment and interview process.

Trojan Learn – Diversity Series: Trains research staff on diversity awareness in the workplace, including: *Diversity Dimension*, *Managing Diversity*, *Diversity Tensions*, and *Diversity on the Job*.

Scholarly and Creative Programs: Studying Diversity

Zumberge Diversity and Inclusion (D&I) in Research Award supports research and scholarship that addresses critical gaps in knowledge on equity, diversity, and inclusion, or which benefits diverse communities, providing up to \$30,000 for one-year research projects. Eligible topics include research that collaborates with minority-serving organizations; that is informed by and serves the needs of diverse communities; or that targets training or career grants to enhance the number of URM scholars.

USC Race and Equity Center facilitates collaborations on grant proposals, publications and research, as well as supports the production of digital media, colloquia performances, and signature events in the area of diversity and equity. It will also support academic development of PhD students, providing a space to connect academically and socially with other doctoral fellows, faculty affiliates, and center researchers pursuing interesting race-related research questions.

Annenberg School for Communication & Journalism Media, Diversity, & Social Change Initiative develops research-based solutions to tackle inequality through: *a) Research:* using data-driven and theory-based research to offer insight and evidence to industries on where diversity is needed and how to achieve it; *b) Advocacy:* fostering inclusion and to give a voice to disenfranchised or marginalized groups and *c) Action:* offering simple actions for complex solutions to facilitate social change at the student, industry, and societal levels.

Institute for Diversity and Empowerment at Annenberg (IDEA) supports scholars, leading research, courses, and programs that allow students to examine the vast complexities of diversity, identity, and culture across both the School of Communication and the School of Journalism.

Minority Aging Health Economics Research Center in USC's Schaeffer Center for Health Policy and Economics, works to increase the number, diversity, and academic success of researchers focusing on the health and economic well-being of minority elderly populations. Research examines the differences across racial and ethnic groups of elderly in: *a) health care decision making*, *b) health behaviors and outcomes*; and *c) financial behavior including savings and work, and economic well-being*.

USC Childhood Obesity Research Center (CORC) is a collaboration between USC Keck School of Medicine and Children's Hospital of Los Angeles that investigates childhood obesity, related conditions, and their relationship to minority health, and develops novel strategies for prevention and treatment. Research to elucidate mechanisms that contribute to ethnic differences in African American and Hispanic adipose tissue morphology and adipose tissue gene expression is one of many ongoing studies.

USC Suzanne Dworak-Peck School of Social Work is dedicated to eliminating racial injustice and promoting an ongoing process of healing and reconciliation to dismantle racism. Social work and nursing have a long-standing tradition of research that serves to uphold and improve diversity, equity and inclusion, including projects such as:

- **The LGBT Health Equity Initiative** leads scientific inquiry into the physical, emotional and social health of LGBT youth, adults and families, and guides best practices for achieving health equity for this population. Research areas include: preventing suicide among LGBTQ youth, measuring stress among diverse adolescents; improving acceptance, integration and health among LGBT service members; the impact of early medical treatment in transgender youth; and outcomes for lesbian and bisexual women in co-occurring treatment.
- **Programa Esperanza (Project Hope) Research Period:** The primary aim of the study is to test the comparative effectiveness of Programa Esperanza and enhanced usual care (EUC). Programa Esperanza is a short-term, culturally modified psychosocial intervention for Spanish-speaking Latino patients 55 years of age or older with depression and multiple medical conditions.
- **A Helping Hand to Activate Patient-Centered Depression Care among Low-Income Patients (AHH)**, which aims to improve patient self-care management and patient-provider care management relationships among underserved low-income, primarily immigrant Latino patients, who must simultaneously cope with major depression and chronic co-morbid physical illness.
- **The Caregiver Project: Caregiving to Diverse Families in Los Angeles County**, which will test a pilot psychosocial intervention aimed at increasing family caregiver physical and psychological well-being. Based on the intervention, the team will pilot the intervention with English and Spanish-speaking family caregivers in Los Angeles County.
- **Harmonizing U.S. Datasets to enhance the Study of Cognitive Health in Older Minority Populations:** The data harmonization pilot will investigate combining existing local, regional, and national research datasets representing adult aged 50 years and older in the U.S. to provide improved statistical power to study cognitive health related to burden of illness among race/ethnic minority populations.

Rossier School of Education Center for Urban Education leads socially conscious research and develops tools for institutions of higher education to produce equity in student outcomes. Research includes the *Research & Planning Group's Bridging Research Information and Culture (BRIC) Initiative*, a partnership with the Research Planning Group that uses institutional data, disaggregated by race and ethnicity, to create performance benchmarks as part of a strategic planning process to improve equitable student outcomes, among many other collaborative projects nationwide.

The Keck School of Medicine Center for Health Equity in the Americas conducts and promotes national and international research and collaborations on solutions to health disparities throughout the Americas that will contribute to closing gaps in vulnerable populations in achieving health equity. Efforts include "*Promoting Health Equity in Cancer Prevention Health Equity Research Summit*", which focused on the development of a strategic plan for the direction of health equities in the Americas.

The Dornsife College Program for Environmental and Regional Equity (PERE) conducts research and facilitates discussions on *environmental justice* (determining localized impact and broader patterns of environmental inequality), *regional inclusion* (the relationship between regional economic strength and equity), and *social movement building* (providing guideposts for successful social movements and analysis to address immediate issues, and policies).

The USC Price Tomás Rivera Policy Institute (TRPI) researches: *economic well-being*; *educational issues faced by Latinos*; *information technology* and *political and civic engagement*. TRPI maintains an online platform to publish on a variety of topic areas such as immigrant services and Latinos and the criminal justice system. Current research examines disparities in access and use of technology among the foreign-born population as well as whether racial and ethnic minorities receive the same treatment as whites in the criminal justice system, among others.

The Dornsife College Center for the Study of Immigrant Integration (CSII) identifies and evaluates the benefits of immigrant integration for the native-born and for immigrants, and studies the pace of transformation in different locations. Emphases include: scholarship that draws on academic theory and rigorous research; data that provides information structured to highlight the process of immigrant integration over time; and engagement that seeks to create new dialogues with government, community organizers, business and civic leaders, immigrants and the voting public.

USC Law & Global Health Collaboration supported by the USC Collaboration Fund, the collaborative tackles existing and emerging legal and global health concerns on a variety of topics using a cross-disciplinary approach. A year-long series has focused on transgender issues, including symposia such as: *Transgender Youth Care in the New Millennium*; *In Transition: Gender [Identity]*, *Law & Global Health Research Symposium*; *Generating Research to Support Transgender Populations*; *Legal and Other Barriers to Protection for Transgender Asylum-Seekers in the US*, among others.

The Keck School of Medicine Institute for Health Promotion and Disease Prevention Research studies health disparities among minorities locally, regionally, and nationally by: (a) increasing understanding of the epidemiology, determinants, and consequences of disease; (b) conducting field trials to develop and test evidence-based prevention programs; and (c) disseminating model health promotion and disease prevention programs in national and global settings.

CREATE – Homeland Security Center supports the Department of Homeland Security minority research program by hosting research teams from minority serving institutions. The center currently works with minority serving institutions locally (Cal State University Long Beach, Cal State University, Los Angeles), and nationally (Haskell Indian Nations University, Howard University, University of Hawaii, Hilo, University of Puerto Rico, Mayaguez and Alcorn State University).

USC LGBT Health Equity Initiative leads scientific inquiry into the physical, emotional and social health of lesbian, gay, bisexual and transgender (LGBT) youth, adults and families and guide best practices for achieving health equity for this population. Research includes enhancement of a theoretical model of suicide prevention tailored for LGBT individuals, among others.

USC Law & Global Health Collaboration supports researchers working at the intersection of law and global health to identify new pathways for research. The group provides monthly lectures and public discussions, with a focus, this year, on transgender issues, including a speaker series “In Transition: Gender [Identity].”

Rossier School of Education Pullias Center for Higher Education: TSLC Scholars: A Mixed Methods Examination of a Comprehensive College Transition and Success Program for Low-Income Students is a 6 year, \$6.2 million study that explores how program experiences translate to greater success for participants, and who are predominantly first-generation, low-income students.

Center for the Study of Immigrant Integration studies include “Improving Immigrant Access to Insurance and Medical Care Building Resilient Regions: The Immigrant Challenge”

Center for Economic and Social Research (CESR) aims to improve social welfare by informing and influencing decision-making in the public and private sectors. Research includes the Minority Aging Health Economics Research Center - Understanding Racial/Ethnic Inequalities in Wealth Trajectories in Middle and Late Life: Patterns and Explanations.

USC School of Architecture faculty study inequity and historical privilege with respect to the built-environment, including the spaces of women throughout history, the un-even distribution of cultural institutions in Los Angeles; the urbanism of the Black Panther Movement; the relationship between post-apocalyptic films and the representation of environmental injustice in minority communities; spatially distributed relics of power in South Los Angeles, low-income housing locally and globally, and the study of innovative housing models for our aging population.

USC Suzanne Dworak-Peck School of Social Work & IMPULS-Netherlands Research Center for Social Care, Radboud University Medical Center is an international collaboration dedicated to the promotion of social inclusion and to the prevention of social isolation among disadvantaged and marginalized populations, including persons experiencing homelessness and housing insecurity. The collaboration promotes inclusion, and health and well-being, through clinical, social, and community intervention and research in the U.S. and Europe.

USC Center for Artificial Intelligence in Society is a joint venture between the Suzanne Dworak-Peck School of Social Work and the Viterbi School of Engineering that conducts research in Artificial Intelligence to help solve challenging societal problems including addressing the problems faced by disadvantaged groups.

Scholarly and Creative Programs: Clinical Trials and Human Subjects Research

Southern California Clinical and Translational Science Institute (SC-CTSI) provides education, training and online resources for workforce development, with special focus on clinical research in diverse populations. Courses include:

- **Research in Diverse Urban Populations** is a certificate course on clinical and translational research in populations characterized by diversity in race, ethnicity, country of origin, and socioeconomic status.
- **Study Population and Study Design in Clinical and Translational Research:** Video lecture educates researchers on Study Populations, Target Populations, and Source populations, including challenges in diverse “mega-cities”, such as ethnic and cultural differences, subpopulations, and factors that can bias findings and impair generalization of research findings to broader populations.

Exploring Impact of Culture and Genetics on Hispanics with MS, a collaboration with the *Alliance for Research in Hispanic MS*, in partnership with UC San Francisco, actively recruits Hispanics with multiple sclerosis (MS) to participate in a study examining the impact of genetics, acculturation and cultural perceptions on disease severity.

USC Edward R. Roybal Institute on Aging utilizes aging research to develop programs, services and policy recommendations to improve health and life satisfaction of aging minorities. This includes an NIH funded study to *assess the interest and recruit community partners for an interdisciplinary research collaborative*. Other research aimed at minority recruitment includes:

- **BrainWorks: A Comparative Effectiveness Trial to Examine Text Message-Based Alzheimer’s Disease (AD) Education for Community-Dwelling African Americans:** uses text messaging to obtain preliminary data to support trials for interventions to increase African American participation in AD prevention trials and foster a research collaborative between the School of Social Work and the USC Alzheimer’s Therapeutic Research Institute.
- **The Wisdom Project: Exploring Attitudes and Beliefs about Alzheimer’s Disease and Clinical Research among African Americans:** The research explores the beliefs, experiences and informational and educational needs related to Alzheimer’s disease and participation in clinical research among African Americans. The study also investigates the role of race and culture in African Americans’ attitudes and beliefs about AD and participation in clinical research.
- **The Los Angeles Healthy Aging Indicator Project:** will develop multiple population health metric tools and a community dissemination and engagement component corresponding to the community assessment, intervention, and research functions of the Health Aging Los Angeles County initiative.

Norris Comprehensive Cancer Center is a major national resource for cancer research, treatment, prevention, and education. Studies conducted by the center, including tobacco research, cancer communications, nutrition, physical activity, obesity prevention, melanoma and HPV prevention, and screening, either oversample or exclusively focus on low-income minority populations, including but not limited to youth and young adults, taking advantage of LA County’s diversity. Examples include:

- **Translational and Clinical Sciences Program (TACS):** studies cancer disparities, focusing on URM populations and the underserved, such as the African American Hereditary Prostate Cancer Study that has become a model for genetic studies in underrepresented populations and has led to the first genome wide scan for prostate cancer susceptibility genes in African Americans.
- **The Multiethnic Cohort Study of Diet and Cancer (MEC):** one of the largest of its kind, and a collaboration with University of Hawaii Cancer Center, examines lifestyle risk factors, especially diet and nutrition, as well as genetic susceptibility in relation to the causation of cancer; the study population comprises over 215,000 men and women, primarily of African American, Japanese, Latino, Native Hawaiian and Caucasian origin.
- **The Cancer Epidemiology Program** investigates cancer through epidemiological studies, incorporating genetic and molecular epidemiology approaches, and has a defined focus on ethnic diversity, consistent with the populations within the USC Norris catchment area.
- **The Cancer Control Research Program** develops prevention interventions that modify cancer risk behaviors, with a focus on the diverse, vulnerable, and disadvantaged members of the LA catchment area, as it reflects the disparities seen in the US population.

USC Mark and Mary Stevens Neuroimaging and Information Institute, in collaboration with the University of North Texas (UNT) Health Science Center and the University of California, San Francisco, was recently awarded \$12 million grant from the National Institutes of Health to study aging and Alzheimer's among Mexican-Americans (Health and Aging Brain Among Latin Elders – HABLE). The five-year study will recruit 2,000 volunteers from North Texas – half Mexican-Americans and half non-Hispanic White – to gain a better understanding of how Alzheimer's affects Latinos differentially.

The Alzheimer Disease Research Center investigates memory problems and aging, such as the *Ringman study (Estudio de la enfermedad de Alzheimer en Jaliscienses)* that leverages the Human Connectome Project protocol to characterize the anatomical, pathological, physiological, and clinical pre- and symptomatic stages of autosomal dominant subtypes in those of Mexican Mestizo origin, a population typically under-represented in Alzheimer's and other neuroscientific research. By adopting the protocol into Spanish for this population, it also creates a database to enable future studies with Latinos.

The Roski Eye Institute studies diverse and underserved populations, including the *Age-Related Macular Degeneration and Quality of Life in Latinos study*, to assess the association of vision-specific health-related quality of life with age-related macular degeneration (AMD) in adult Latinos; *the Prevalence of AMD in Chinese American Adults study*, to determine the age- and sex-specific prevalence of AMD among Chinese Americans and the *African-American Eye Disease Study*, finding that African-Americans bear heavier burden of diabetic macular edema.

The Center for Translational Pharmacogenomics promotes research in studying genetic variation in drug disposition underlying different ethnic patient populations in Los Angeles communities, to improve treatment efficacy and reduce toxicities. Additionally, the **School of Pharmacy** maintains partnerships with the Los Angeles County Department of Health Services,

Children’s Hospital of Los Angeles and other health agencies to engage ethnicities and economic groups that are traditionally under-represented in clinical research. The school’s “Fotonovela” offers a communication tool for health promotion among low-income, low-literacy Latino populations on topics such as depression, diabetes, and dementia.

Alzheimer’s Therapeutic Research Institute is a consortium dedicated to the acceleration of therapeutic interventions for Alzheimer’s disease. The institute is currently running 14 clinical trials, two of which have a substantial minority recruitment component:

- **Anti-Amyloid Treatment in Asymptomatic Alzheimer’s (A4):** The study tests whether a new investigational treatment can slow memory loss caused by Alzheimer’s disease. Special efforts are made to encourage minority enrollment through outreach efforts (media and community outreach), with a requirement to screen at least one out of every 5 subjects from an under-represented minority.
- **ADNI 3:** The study analyzes brain scans, genetic profiles and biomarkers in blood and cerebrospinal fluid to enable researchers to follow AD as it progresses in an individual, from various points in the disease process. Women and members of minority groups (actively recruited using registries targeting African-American and Latinos), with expected minority participation of 12%, mirroring the 14% aged minority population nationally.

Scholarly and Creative Programs: Human Subject and Community Centered Research

Southern California Clinical and Translational Science Institute (SC-CTSI) assists researchers in forming university-community partnerships through workshops, one-on-one consultations and faculty matchmaking, through programs such as: *LA-CERC Services for the Community* (to help communities and clinical organizations transform health-related needs into promising research) and *Los Angeles Community Engagement Core (LA-CERC) Services for Researchers*. CTSI also offers these courses:

- **Community-Engaged Research 101** covers health solutions among groups that have historically been under-represented in medical studies. Clinical investigators learn ways in which community-engaged research differs from traditional research, and how it transforms the role of community stakeholders from research subjects to research participants, who help shape and drive research questions that address urgent health needs.
- **Promotora Instructional Video:** This Spanish-language video helps researchers develop community-engaged health interventions involving promotoras - community members trained to serve as health educators and service navigators. Lecturers review step-by-step research protocol and data collection tools that are integral to an evidence-based promotora program.

USC Center for Diversity and Democracy: Affiliated with the Department of American Studies and Ethnicity, the CDD works with faculty members, Ph.D. students, undergraduate students, and community partners to enhance university-community civic engagement and the diversity of university faculty and students. The Center focuses on research that stresses imagining a future for Los Angeles and other global metropolitan areas of racial equity and social justice, supporting a diverse and excellent pool of faculty and graduate researchers in Los Angeles committed to issues of diversity and democracy in the local area.

USC Maternal and Developmental Risks from Environmental and Social Stressors (MADRES) Center for Environmental Health Disparities is one of five national university centers funded by the NIH/EPA to work with local communities to better understand ways to improve environmental conditions for vulnerable populations. The MADRES research and outreach programs bring together clinical, environmental, social and public health scientists and community engagement professionals to elucidate the relationships between biological, chemical, environmental, genetic and epigenetic, and social factors.

Homelessness Initiative is one of the “wicked problems” to be tackled by the university. Towards this end, USC is harnessing university resources and expertise to encourage research collaboration, coordination and education to address homelessness across Los Angeles County. A multidisciplinary pipeline of faculty, professionals and students currently work in this area, developing state-of-the-art interventions and conducting research to guide public and private strategies and innovative solutions.

The USC School of Architecture has been engaged in a multi-tiered response to designing for diverse often disenfranchised or neglected populations, including work with the 32nd Street K-12 Magnet School, and Early Head Start Centers in Promise Zone neighborhoods. It is also active in finding creative solutions of ongoing housing shortages including temporary homeless shelters. Landscape work includes collecting data to support the design of solutions for sites ranging from the Owens Lake valley, Los Angeles River and the Salton Sea.

Environmental Health Science Center develops scientific knowledge, investigator teams, and community engagement needed to reduce the burden of diseases and disability from environmental impacts. An important component of the program is its *Community Outreach and Engagement Core* that shares research findings with the public, trains community volunteers and student groups in community-based research and functions as a bridge to inform researchers about community concerns, building strong community-academic partnerships to address health impacts and environmental health disparities.

Community Relations Research reports such as the *State of the Neighborhood*¹ inform university leadership and researchers of strategic priority areas for interdisciplinary faculty research and scholarship that could further inform community needs and assets, as well as place-based research and interventions; additionally, the report is as a resource for university and community stakeholders in civic engagement, place-based research and student service learning.

Office of Community Partnerships directs outreach efforts and activities and works with faculty and stakeholders on campus to provide coordination and leadership in facilitating community partnerships associate with community-based health research.

¹ Amaro, H. and Advancement Project (2015). *State of the Neighborhood Report, 2015*. University of Southern California

Office for the Protection of Research Subjects – Faculty/Community Event is a one day networking event for researchers/ faculty who are doing community engaged projects to showcase committed community researchers, partners and participants, foster collaborations and present panel discussions of issues of interest (e.g.: building & sustaining relationships, funding and resource allocation, successes and barriers, unique approaches).

Data Collection and Presentation

USC had more than \$700 million in research expenditures in FY2016, is ranked second in the nation among all universities in the size of its federally funded computer science research program, and has the largest graduate program in science, engineering and health of all private research universities. Measures of USC’s size and accomplishments include:

- #15 in the Wall Street Journal/Times Higher Education ranking of American colleges and universities, and #23 in the US News and World Report ranking of national universities.
- #14 worldwide in the Thomson Reuters innovation ranking of American universities (#6 among private American universities).
- Ranked #10 among private research universities in federally funded research expenditures.

While these distinctions reflect the overall size of our research program, we also seek to succeed in expanding diversity. We reflect here on data available through the Integrated Postsecondary Education Data System (IPEDS), USC’s Total Access for Research Administration (TARA) reporting system and national research databases.

FACULTY

According to the Chronicle of Higher Education (**Figure 1**), in a survey of 1,605 degree-granting US colleges and universities (and nearly 625,000 full-time faculty), regardless of size or classification, 45.9% of full-time faculty members were women, compared to 36.9% at USC, with “minority” group members comprising 20.5% of total full-time faculty, compared to 23.7% at USC.² Public four-year colleges had a slightly lower proportion of women (43.5%) and a higher proportion of minorities (27.6%). “Total minority” includes non-white faculty members whose race is known, as well as those with two or more races, but does not include non-residents.

² Chronicle of Higher Education data for 2015 - Race & Ethnicity of Full-Time Faculty; Source: US Department of Education, National Center for Education Statistics; Data are for 1,605 degree-granting institutions that grant associates or high degrees and participate in Title IV federal programs. A person can only be counted in only one category and Hispanics may be of any race.

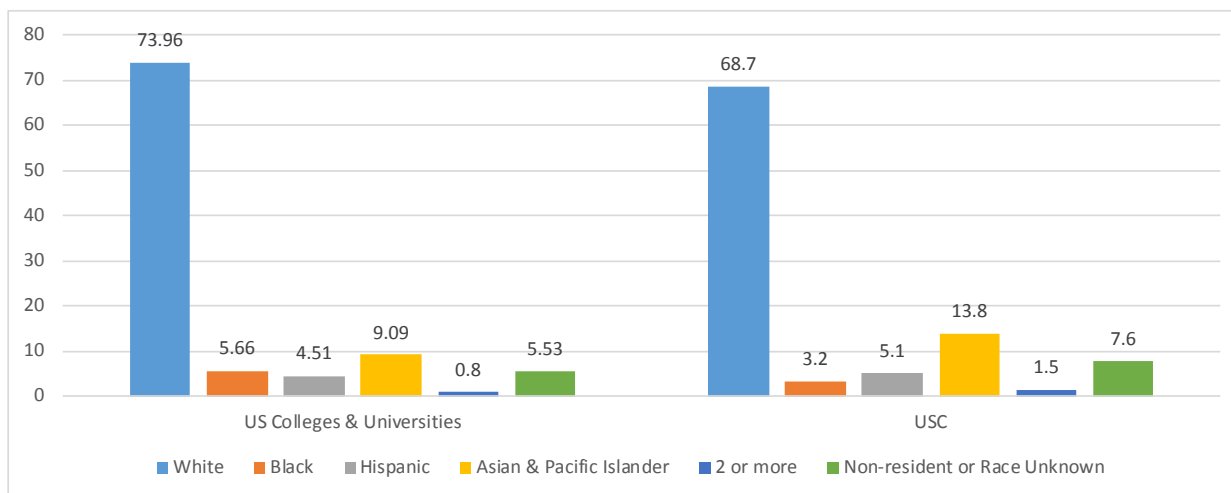


Figure 1. Ethnicity & Race: Percentage of Total Full-Time Tenured Faculty (2015 data)³

The Office of Research administers research grant awards and funding programs available to USC faculty, which are supported by the Provost’s Office as well as individual foundations. The gender distribution of the total number of proposals received for each program, as well as the gender distribution in awards made is given in **Tables 1 and 2** and **Figure 2**. Reflecting on the data, the office is actively engaging female faculty to encourage their applications to the Ming Hsieh Institute, including development of new topics to better reflect the research foci of our faculty.

Table 1. Office of Research Proposals Received

	Total # of Proposals Received		Total # of Proposals with at least 1 Female PI or Co-PI		PI		PI		Co-PI(s)* per proposal		Co-PI(s)* per proposal	
	2017	2016	2017	2016	2017		2016		2017		2016	
					Female	Male	Female	Male	Female	Male	Female	Male
Rose Hills	22	4	12	2	12	10	2	2	N/A	N/A	N/A	N/A
Core Instrumentation	14	7	4	1	2	9	0	7	2	3	1	12
Collaboration Fund	15	16	8	9	6	9	7	9	7	22	8	22
Zumberge individual	29	41	16	20	16	13	20	21	N/A	N/A	N/A	N/A
Zumberge Small	6	10	3	5	2	4	2	8	3	5	4	12
Zumberge Large	11	25	4	17	2	9	10	15	3	20	20	36
Zumberge D&I	15	0	14	0	11	4	0	0	11	2	0	0
Ming Hsieh	12	21	3	7	2	10	4	17	1	24	3	39

³ Ibid

Table 2. Office of Research Proposals Awarded⁴

	Total # of Proposals		Total # of Proposals with at least 1 Female PI or Co-PI		PI		PI		Co-PI(s)* per proposal		Co-PI(s)* per proposal	
	2017	2016	2017	2016	2017		2016		2017		2016	
					Female	Male	Female	Male	Female	Male	Female	Male
Rose Hills (1)	5	4	2	2	2	3	2	2	N/A	N/A	N/A	N/A
Core Instrumentation Fund (2)	8	7	1	1	1	7	0	7	0	5	1	7
Collaboration Fund (3)	13	8	8	5	5	8	5	3	7	17	1	11
Zumberge individual (4)	10	12	4	6	4	6	6	6	N/A	N/A	N/A	N/A
Zumberge interdisciplinary Small	4	6	2	3	1	3	1	5	3	3	2	7
Zumberge interdisciplinary Large	2	3	0	2	0	2	1	2	0	1	4	5
Ming Hsieh (5)	6	8	1	2	1	5	0	8	0	14	2	10

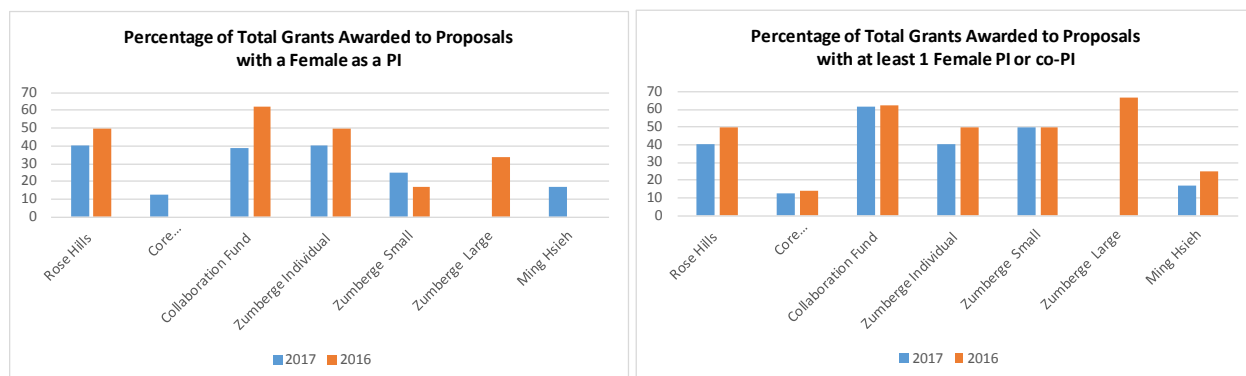


Figure 2. Distribution of Grants Awarded by Gender

Female faculty have had a growing impact on research at USC. For example, over the past five years, the Dornsife College has grown its female faculty conducting federal and foundation sponsored research (156 in 2013 and 206 in 2017), with direct expenses growing by 55%. In STEM fields the direct expenses for female faculty has grown by 38% and now represents 14% of the total direct expenses (up from 8% in 2013) and 20% of the faculty. The impact on research of underrepresented minorities at Dornsife is highlighted by the fact that American Indian or Alaska Native have the highest expense per grant with an average expenses per grant of \$395K; Hispanic or Latino are the second highest with an average expenses per grant of \$385K per grant compared. Another example of increased diversification of faculty is the Sol price School of Public Policy: of the 13 professors hired since July 2014, 11 are from underrepresented groups or are women.

⁴ * Not including PI; co-Pis may be named in more than one proposal; (1) Award does not allow for co-Pis. No new proposals received for 2016; only renewals of 2015 awardees. (2) Type A and Type B proposals. (3) Includes all “active” groups (new and renewals, including no-cost extensions). (4) Award does not allow for co-PI. (5) Three requests for proposals made in 2016 including a Special Solicitation, awarded Dec 2015, but paid in FY16

Another dimension of diversity is inventorship. Using the Viterbi School as an example, inventors are predominantly male (**Tables 3 and 4**), which to a great degree reflects the composition of the faculty as a whole in engineering. Increasing gender diversity among inventors needs to be a university priority, coupled with diversifying the faculty and students in science, engineering and medicine.

Table 3. Invention Disclosures from the Viterbi School

Viterbi Disclosures FY14 - FY16

	FY14	FY15	FY16	Total
Total Disclosures	113	89	96	298
Disclosures with Female Inventors (Lead)	5	6	11	22
% of Disclosures with Female Inventors (Lead)	4%	7%	11%	7%
Disclosures with Female Inventors (Non-Lead)	17	12	15	44
% of Disclosures with Female Inventors (Non-Lead)	15%	13%	16%	15%
Total Female Inventors (Lead and Non-Lead)	22	18	26	66
Total % (Lead and Non-Lead)	19%	20%	27%	22%

Table 4. Provisional Patents for the Viterbi School

Viterbi Provisional Patents FY14 - FY16

	FY14	FY15	FY16	Total
Total Provisional Patents	37	38	29	104
Provisional Patents with Female Inventors (Lead)	1	3	8	12
% of Provisional Patents with Female Inventors (Lead)	3%	8%	28%	12%
Provisional Patents with Female Inventors (Non-Lead)	5	6	7	18
% of Provisional Patents with Female Inventors (Non-Lead)	14%	16%	24%	17%
Total Female Inventors (Lead and Non-Lead)	6	9	15	30
Total % (Lead and Non-Lead)	16%	24%	52%	29%

STUDENTS AND POSTDOCS

For the data provided below on USC and other universities, diversity is measured among USC permanent residents and citizens, as is reported to federal agencies.

Student diversity: Los Angeles County (27% Non-Hispanic White, 47.5% Hispanic, 8.4% Black, 13.9% Asian, 2.1% Mixed and 0.7% Other⁵) includes large populations of people who would be smaller minorities elsewhere. In particular, nearly half of the county's residents are Hispanic, with an even higher percentage among K-12 students. USC's undergraduate population, by comparison, is more similar to major research universities in California, with higher proportions of whites and Asians in particular.

⁵ Statistical Atlas -

In the 2016 academic year, nearly 20% of students in the incoming undergraduate class were from historically underrepresented minority backgrounds. Additionally, 13% were first-generation college students. The race/ethnicity and gender breakdown of the undergraduate and graduate student population for the previous three enrollment cycles is given below (*IPEDS Data; <http://oir.usc.edu/ipeds/>*).

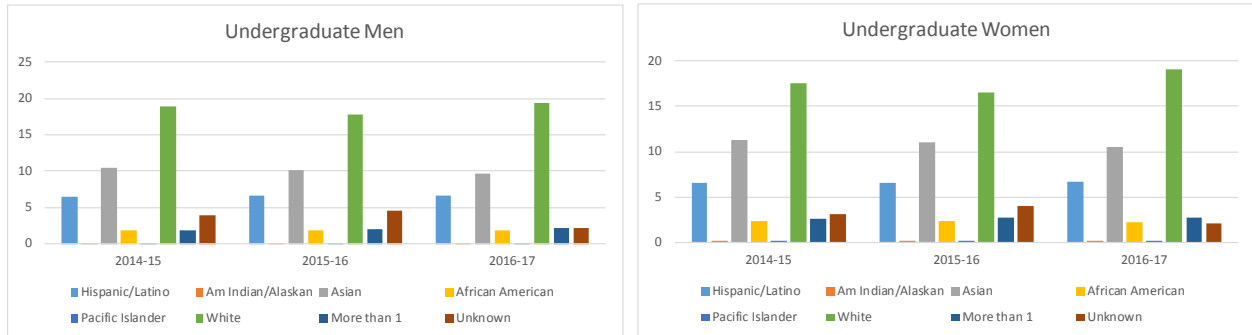


Figure 3. 12-Month Enrollment – Gender & Race/Ethnicity: Percentage of total undergraduates

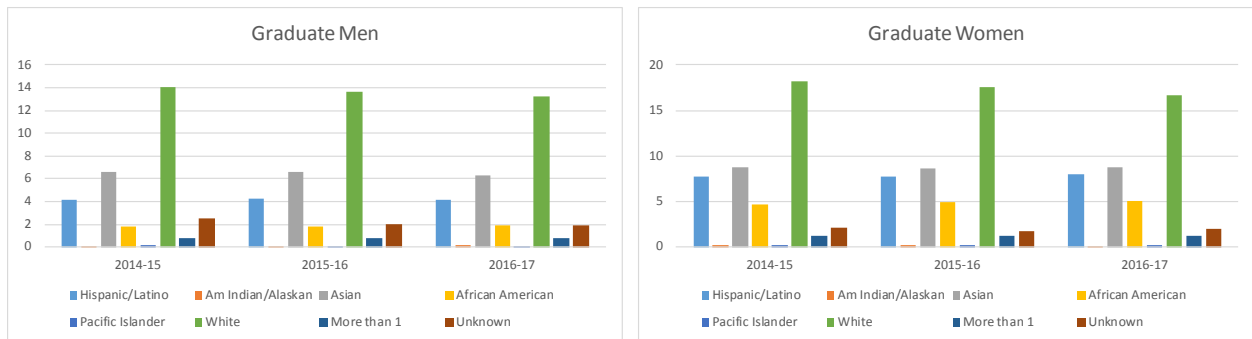


Figure 4. 12-Month Enrollment – Gender & Race/Ethnicity: Percentage of total graduate students

Doctoral Student Research: Approximately 25% of the doctoral degrees awarded at USC in 2016 were to African American, Hispanic/Latino, Pacific Islander, or American Indian (USC Enrollment Services Data, 2015-16), which is similar to national statistics (27.7% of doctorate degrees in the US are awarded to minority students (American Indian, Alaskan native, African American, Hispanic, Asia, or > 2 races)⁶. International students represented 42% of enrollment in doctoral programs at USC in 2016 and represented 40% of doctoral degree recipients for the 2015-2016 school year⁷.

⁶ Percentage distribution of U.S. resident post-baccalaureate enrollment in degree-granting postsecondary institutions, by institutional control and student race/ethnicity: Fall 2015; nces.ed.gov/programs/coe/indicator_csb.asp

⁷ Enrollment Services Data, 2016, USC

Graduate Student Enrollment by Ethnicity & Race (2015)⁸: The USC graduate student population shows greater diversity compared to that of US private, non-profit universities nationwide (Figure 5).

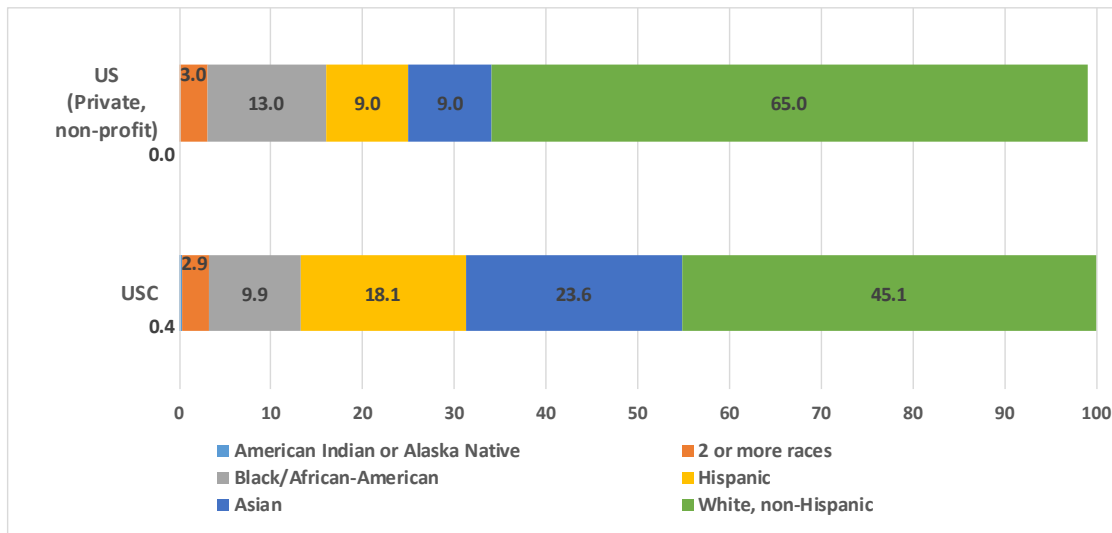


Figure 5. Graduate Student Enrollment at USC

With respect to research participation, an initial barrier to college access for minorities and low-income students is financial aid and mentoring. The university currently enrolls approximately 4,000 low-income undergraduate students, as defined by Pell Grant awards. (USC Financial Aid & Enrollment Data, 2015-16 and IPEDS). Low-income, first generation college students, and underrepresented minority students at USC graduate at rates comparable to the overall undergraduate population (USC Enrollment Data, 2016), which is encouraging, given the recognized need to address concerns with the pipeline of undergraduates, in particular URM students, to pursue a Ph.D. Unfortunately, the university at present lacks data on participation of minorities in research programs or their progress into research careers.

DIVERSITY SCHOLARSHIP AND RESEARCH

To understand the scope of research on diversity at USC we searched for active grants using keywords *minority*, *diversity* and *Hispanic* (Table 5). At present, such studies address a variety of topics, including health-related themes (*Healthcare Stereotype Threat and Minority Aging* and *Leveraging ancestral diversity to map adiposity loci in Hispanics*) and non-health related research topics, include minority leadership in education. For example, identifying practices that support improved teaching and learning and improve participant’s understandings of school leadership (*FIELD: Fieldwork Inspiring Expanded Leadership and Diversity*). Funding to increase minority representation of student research is also supported in the form of grants (*ADA Minority Undergraduate Internship Award*).

⁸ USC source: IPEDS, 2015-16 enrollment US source: US DOE, Degree-granting institutions granting Associates or higher degrees and participate in Title IV federal financial aid programs.

With respect to human subject research, minorities account for fewer than 10 percent of patients enrolled in clinical trials, according to the National Institutes of Health National Institute on Minority Health and Health Disparities (2016). Research at USC seeks to promote diversity in health-related research — ongoing clinical trials and human subjects studies at USC take advantage of the rich ethnic and racial diversity of the surrounding community and actively recruit minority representation and/or focus on topics that specifically address minority needs, such as *Air Pollution Effects on Asthma and Lung Function in Hispanic Children*; *African American Prostate Cancer Scan* and *Internalized Stigma Among Women of Color Living with HIV/AIDS*. Examples of non-health-related human subjects studies address issues in education and of societal interest, such as *Comparing the motivational beliefs and learning strategies of basic and proficient high school urban students*, *Ethnic conflicts* and *Factors related to the Success of Latino Community College Students*.

In **Table 6**, we provide the results of a keyword search within the iStar system for human subject studies on diversity at USC.

Table 5. Funded Diversity Research at USC

Source: Quali Database of funded Institutional Proposals using keywords minority, Hispanic, African American, Black, Asian, Latino, diversity, community, underserved, gender, disparity, transgender, discrimination, LGBTQ and bias

Principal Investigator	Lead Unit Name	Proposal Title	Sponsor Name
Albert Weerman	USC Dornsife Center For Economic And Social Research	Health and Aging in Africa: Longitudinal Studies of an INDEPTH Community (HAALSI)	Harvard School of Public Health
Ann Hamilton	Preventive Medicine	Life Course Energy Balance and Breast Cancer Risk in Black/White	University of Wisconsin, Milwaukee
Anne Peters	Department of Medicine	Specialized Technology Education for Pumps & Pens in Underserved Populations with Diabetes (STEPP-UP)	Leona M. and Harry B. Helmsley Charitable Trust
Anthony Hassan	Social Work	Strengthening the Transition of Veterans into the Community	Blue Shield of California Foundation

Anthony Hassan	Social Work	Strengthening Transition of Veterans and their Families into the Community	Prudential Financial, Incorporated
Anya Samek	USC Dornsife Center For Economic And Social Research	Anya Samek Advisory Services to Blackbaud	Blackbaud
Avelardo Valdez	Social Work	Interdisciplinary Research Training Institute on Hispanic Drug Abuse	US-National Institute of Drug Abuse
Barbara Robinson	USC Libraries	Digital Collections for Latin American and U.S. Latino Spanish Language Research	Latin Americanist Research Resources Project
Beth Pyatak	Occupational Science and Occupational Therapy	Diabetes Self-Management Lifestyle Intervention for Urban Minority Young Adults	US-National Institute of Arthritis, Diabetes, Digestive and Kidney Diseases
Brendesha Tynes	Individual Rossier Grant Activity	CAP: Towards Inclusive Design in K-12 Serious Gaming: Examining Intersections of Gender, Race and Culture in Digital Games for Learning	University of Pennsylvania
Brian Bernards	East Asian Languages and Cultures	Imagined Horizons: The Multicultural Nationscapes of Inter-Asian Cinema	Social Science Research Council
Brie Loskota	Center for Religion and Civic Culture	Reverend Cecil "Chip" Murray Archives: Documenting and Resourcing African-American Community Engagement in Southern California	John Randolph and Dora Haynes Foundation

Caleb Finch	Davis School of Gerontology	Amyloid and inflammation: modulation by apoE, gender, air pollution, and drugs	US-National Institutes of Health
Carin Van Zyl	Department of Medicine	Community-Based Palliative Care in California Public Hospitals	California HealthCare Foundation
Cecil Murray	Center for Religion and Civic Culture	Community Church Transformation Project (CCTP)	Weingart Foundation
Christina Yu Yu	USC Pacific Asia Museum	USC PAM's Education and Community Access Program	The Nissan Foundation
Christine De Rosa	Preventive Medicine	Keeping It Real Together (KIR-T): Integrating Successful Pregnancy Prevention Programs into Large Urban School Districts and Community Systems	US-Department of Health and Human Services
Christopher Haiman	Center for Genetic Epidemiology	Leveraging ancestral diversity to map adiposity loci in Hispanics	University of North Carolina, Chapel Hill
Cleopatra Abdou	Davis School of Gerontology	Healthcare stereotype threat, health disparities, and minority aging	US-National Institute on Aging
Cleopatra Abdou	Davis School of Gerontology	Psychosocial mediators and moderators of healthcare stereotype threat in older African Americans and Latinos	University of California, Los Angeles
Cleopatra Abdou	Davis School of Gerontology	The Center for Health Improvement of Minority Elderly	University of California, Los Angeles

Concepcion Barrio	Social Work	Improving Informed Consent for Latinos with Schizophrenia	University of California Regents
Concepcion Barrio	Social Work	Latino Perspectives on Data-Sharing in Psychosis Research	University of California San Diego
Concepcion Barrio	Social Work	The Role of Protective Factors on Outcomes for Latinos with Schizophrenia	US-National Institute of Mental Health
Dana Goldman	Schaeffer Center	Healthcare Stereotype Threat and Minority Aging	US-National Institute on Aging
Dana Goldman	Schaeffer Center	USC Resource center for Minority Aging Research (US-RCMAR)	US-National Institute on Aging
David Belasco	Greif Center Blackstone LaunchPad Program	2017 Blackstone LaunchPad Techstars Training Camp Travel Grant	Blackstone Charitable Foundation
David Belasco	Greif Center Blackstone LaunchPad Program	Blackstone 2016 Forbes 30 Travel Grant	Blackstone Charitable Foundation
David Kang	East Asian Studies Center	USC-UCLA Joint East Asian Studies Center NRC and FLAS Program	US-Department of Education
David Traum	Institute for Creative Technologies	CI-P: Collaborative Research: RUSD - Real User Speech Data for the spoken dialog community	US-National Science Foundation
Diane Winston	Annenberg School	Religion Dispatches: Reporting on Religious Liberty and LGBTQ Issues	Arcus Foundation
Domenika Lynch	UA-USCAA	USC Latino Alumni Association Scholarship and Leadership Development Program	James Irvine Foundation

Eileen Crimmins	Davis School of Gerontology	Disadvantaged Neighborhood Contexts, Social Resources, and Health Among Older Whites, Blacks, and Hispanics: Examining the Pathways	US-National Institute on Aging
Emi Minejima	CPPEP	Extended Spectrum B-lactamase Infections in a Medically Underserved Population	American Association of Colleges of Pharmacy
Emily Dossett	Psychiatry and Behavioral Science	Creating a Culture of Health for Preinatal Women with Mental Illness: A Community Engaged Policy and Research Initiative	Robert Wood Johnson Foundation
Emily Putnam-Hornstein	Social Work	Child and Community Level Asset-focused Predictive Risk Modeling	Robert Wood Johnson Foundation
Erick Guerrero	Social Work	Detection, Understanding and Reduction of Latino Health Care Disparities	US-National Institute of Drug Abuse
Erick Guerrero	Social Work	The Role of Community Health Workers in Substance Abuse Treatment in Los Angeles County (diversity supplement)	US-National Institute of Drug Abuse
Estela Bensimon	Center for Urban Education	Mathematics Identity and Sense of Belonging in Math of Successful African-American Students in Community College Developmental Mathematics Courses	American Educational Research Association

Estela Bensimon	Center for Urban Education	Promising Practices for Improving Student Access for Community College Men of Color	San Diego State University Foundation
Estela Bensimon	Center for Urban Education	Service Agreement between CUE and Los Angeles Community College for LA Trade Technical College (LATTC)	Los Angeles Community College District
Ewa Deelman	Information Sciences Institute	XSEDE 2.0: Integrating, Enabling and Enhancing National Cyberinfrastructure with Expanding Community Involvement	University of Illinois
Frank Gilliland	Occupational and Environmental Health	Community-engaged approach to characterize the 'dust exposome'	US-National Institutes of Health
Gale Sinatra	Individual Rossier Grant Activity	Master's of their Destinies? Hispanic Students' Sense of Control in Relation to Post-Secondary Outcomes, a Generalized Structural Equation Modeling Approach	American Educational Research Association
Gary Painter	CSI (Center for Social Innovation)	Community Needs Assessment for the Pediatric Brain Tumor Foundation	Pediatric Brain Tumor Foundation
Gary Painter	CSI (Center for Social Innovation)	Developing Data Indicators for Community Change in Little Tokyo	Little Tokyo Service Center

Gary Painter	CSI (Center for Social Innovation)	Morongo Valley: Proposal for Community Health Needs Assessment	Morongo Basin Healthcare District
Gisele Ragusa	Engineering Office of the Dean	Research on Innovation and Creativity in Higher Education in engineering and Sciences (RICHES) for Community Colleges	US-National Science Foundation
Han Wang	Electrical Engineering-Electrophysics	CAREER: Harnessing Tunable Properties of Black Phosphorus for Novel Electronic Device Application	US-National Science Foundation
Jan Amend	Earth Sciences	REU Site: Community College Cultivation Cohort (C4)	US-National Science Foundation
Jane Figueiredo	Preventive Medicine	Adding Hispanics to Ongoing GAWS in Colorectal Cancer	US-National Cancer Institute
Jennifer Unger	Preventive Medicine	Drug use among Hispanic Emerging Adults	US-National Institute of Drug Abuse
Jeremy Goldbach	Social Work	A longitudinal investigation of minority stress in a diverse national sample of sexual minority adolescents	US-National Institute of Mental Health
Jeremy Goldbach	Social Work	Improving Acceptance, Integration and Health among LGBT Service Members	US-Department of Defense

Jeremy Goldbach	Social Work	Measuring Stress among Racially & Ethnically Diverse Sexual Minority Adolescents	US-National Institute of Child Health and Human Development
Jeremy Goldbach	Social Work	Reducing Suicidality among LGBT Youth through Crisis Services: Evaluation of The Trevor Project	The Trevor Project
Jill Johnston	Occupational and Environmental Health	Community Outreach and Engagement Program	Marisla Foundation
Jody Agius Vallejo	Sociology	Class and Assimilation Among Latino Entrepreneurs in the Formal: Economy	American Sociological Association
Jody Agius Vallejo	Sociology	Ethnic Safety Nets: Do Elite Latino Entrepreneurs Help to Alleviate Poverty in Latino Communities?	University of California Davis
Joel Milam	Preventive Medicine	Reducing racial/ethnic inequities in childhood cancer survivorship- Minority Supplement	US-National Institutes of Health
John Heidemann	Information Sciences Institute	Los Angeles/Colorado Application and Network Information Community	US-Department of Homeland Security
Jonathan Taplin	Annenberg School	Blackstone Launch Pad at USC	Blackstone Charitable Foundation
Joseph Hawkins	USC Libraries	Cold War Queer: The Pre-Stonewall LGBTQ Digitization Project	US-National Endowment for the Humanities
Judy Pa	Institute for Neuroimaging and Informatics	Gender and APOE4 effects on brain morphometry, cognition, and clinical progression to Alzheimer's Disease	US-National Institutes of Health

Julie Posselt	Individual Rossier Grant Activity	A National Network for Access and Inclusion in Physics Graduate Education	American Physiological Society
Kate Wilber	Davis School of Gerontology	Extending the Visibility and Reach of Latino Economic Security: Fostering Change Through Advocacy and Outreach	University of California, Los Angeles
Kate Wilber	Davis School of Gerontology	Pre-Pilot Testing of a Universal Assessment for California Home- and Community-Based Services	University of California, Los Angeles
Kathleen Page	Department of Medicine	Christina Ramsey ADA Minority Undergraduate internship Award	American Diabetes Association
Kathleen Page	Keck School of Medicine	Mechanisms underlying increased risk for obesity and diabetes in Hispanic children	US-National Institute of Diabetes and Digestive and Kidney Diseases
Kathleen Wilber	Davis School of Gerontology	Development of a Universal Assessment for California's Home and Community-Based Services Programs: Phase One	University of California, Los Angeles
Kevin King	Radiology	Association of cerebrovascular reactivity on BOLD fMRI with structural brain insults and cognitive decline in a community based cohort	Radiological Society of North America
Kim Thomas-Barrios	Government and Civic Engagement	Community Computing Center - Ahmanson	Ahmanson Foundation

Kristina Lerman	Information Sciences Institute	Measuring and Mitigating the Impact of Network Bias on Computation in Graphs (NetBias)	US-Army-Army Research Office
Leland Saito	Sociology	Community Benefits Agreements in Los Angeles: AEG's LA Live and the National Football League Stadium	John Randolph and Dora Haynes Foundation
Lilyana Amezcua	Neurology	Capacity Building for Multiple Sclerosis Education in Hispanic Communities	Biogen Idec
Lilyana Amezcua	Neurology	Hispanic Short-Film as an intervention in MS outcomes	Biogen Idec
Lindsey Malcom-Piqueux	Center for Urban Education	Center for Urban Education Equity Scorecard at Tulsa Community College	Tulsa Community College
Manuel Pastor	Program for Environmental and Regional Equity	A Changing South Los Angeles, A Changing America? Black-Latino Coalition Building for Civic Health and Neighborhood Well-being	W.K. Kellogg Foundation
Manuel Pastor	Program for Environmental and Regional Equity	Dissemination of Knowing Together, Growing Together: Equity, Growth and Community in a Changing Economy	Institute of International Education
Manuel Pastor	Program for Environmental and Regional Equity	Research and Relationship: Supporting community and civic engagement for the next California	James Irvine Foundation

Manuel Pastor	Program for Environmental and Regional Equity	Youth Leadership and Health Study: Understanding How Civic Engagement Shapes Individual and Community Well-Being	University of California Santa Cruz
Marc Weigensberg	Pediatrics-LAC/USC	Guided Imagery Lifestyle intervention to prevent and treat obesity in Latino Youth	National Center for Complementary and Integrative Health
Marco Angrisani	USC Dornsife Center For Economic And Social Research	Participation in the Financial Sector Among Minority Elders and their Well Being	Rand Corporation
Maria Aranda	Suzanne Dworak-Peck School of Social Work	Harmonizing U.S. Datasets to enhance the Study of Cognitive Health in Older Minority Populations	USC Suzanne Dworak-Peck School of Social Work Research Council
Maria Aranda	Suzanne Dworak-Peck School of Social Work	Programa Esperanza (Project Hope)	Patient-Centered Outcomes Research Institute (PCORI)
Maria Aranda	Suzanne Dworak-Peck School of Social Work	The Caregiver Project: Caregiving to Diverse Families in Los Angeles County	California Community Foundation
Maria Aranda	Suzanne Dworak-Peck School of Social Work	A Helping Hand to Activate Patient-Centered Depression Care among Low-Income Patients (AHH)	Patient-Centered Outcomes Research Institute (PCORI)

Marty Kaplan	Annenberg School	Planning and Management of a Public Health Communication and Community Engagement Technical Assistance Cooperative Agreement	US-Center for Disease Control
Mary Lawlor	Occupational Science and Occupational Therapy	Building a Community to Promote Stakeholder Engagement in Research for Adolescents with Spinal Cord Injuries	Colorado Foundation for Public Health and the Environment
Mercy Willard	UA-USCAA	University of Southern Californian Latino Alumni Association Scholarship and Scholar Professional Development Program	Parents Alliance
Meredith Drake Reitan	Graduate School	Community Development Agreements: Addressing Urban Inequality through Urban Development Projects in Los Angeles	John Randolph and Dora Haynes Foundation
Meredith Drake Reitan	Graduate Programs	Representation in a Multi-Racial Southern California: The voting behavior of Asian Americans	John Randolph and Dora Haynes Foundation
Michael Dube	Department of Medicine	PrEP Linkage, Adherence & Pharmacology in Transgender Persons	University of California San Diego
Michael Messner	Sociology	2014 Gender in Televised Sports	Purdue University

Michael Nichol	Price School of Public Policy	Latino Type 2 Diabetic Quality Improvement Program	Merck Sharp & Dohme Corporation
Michelle Levander	Annenberg School	Community Engagement Initiative	Blue Shield of California
Minnie Prince	USC Radio Stations	CPB - Community Service Grant FY 17	Corporation for Public Broadcasting
Monica Jolles	Social Work	Tools for Engagement: Building Capacity for PCOR Within Community Behavioral Health Organizations Serving Latinos	University of North Carolina, Chapel Hill
Omar Lopez	Social Work	Workforce Development of Integrated Behavioral Health Practitioners to Serve Medically Underserved and Rural Populations on the West Coast	US-Health Resources and Services Administration
Ricky Bluthenthal	Preventive Medicine	Ethical issues in collaborations between researchers and community organizations	University of California San Diego
Rob McConnell	Preventive Medicine	Near roadway air pollution and metabolic dysfunction among minority children and	US-National Institutes of Health
Robert Rueda	Individual Rossier Grant Activity	Impact of the STEM21 Competency-Based Education Model on Underserved Student Engagement, Self Regulation, and Academic Growth	Education Connection
Roberta Mckean-Cowdin	Preventive Medicine	Los Angeles Latino Eye Study	University of Illinois at Chicago

Roberto Suro	Price School of Public Policy	Latinos. Criminal Justice. and Community Safety in California	Tides Center
Rohit Varma	Ophthalmology	Los Angeles Latino Eye Study	US-National Eye Institute
Roseann Mulligan	Ostrow School of Dentistry	Community Oral Health Training and Professional Pipeline Connector	Kaiser Foundation Hospitals, Incorporated
Sandra Kaplan	Individual Rossier Grant Activity	The National and California Context of Under-Representation of Poor and Minority Students in Programs for the Gifted and Talented	US-Department of Education
Sarah Ingersoll	Neurology	Los Angeles County Moving Day Community Grant Award application	National Parkinson Foundation
Selma Holo	USC Pacific Asia Museum	Education and Community Access Programs	Katherine Audrey Webb Foundation
Selma Holo	USC Pacific Asia Museum	South Asian Gallery Renovation	US-National Endowment For The Arts
Sheila Murphy	Annenberg School	Barriers to Cervical Cancer Prevention in Hispanic Women: A Multilevel Approach	US-National Cancer Institute
Shinyi Wu	Social Work	Economic Impact of Alzheimer's in the Latino Community	

Sofia Gruskin	Preventive Medicine	Strengthening Regional and National Legislative Environments to Support the Enjoyment of Human Rights of LGBT People and Women and Girls affected by HIV and AIDS in Sub-Saharan Africa	United Nations Development Programme
Stephen Gruber	Norris Comprehensive Cancer Center	USC HPV Immunization Collaborative in Clinical and Community Settings	US-National Cancer Institute
Stephen Smith	USC Shoah Foundation of Visual History and Education	Witness: Outreach to the Jewish Educational community of Los Angeles	Jewish Federation of Greater Los Angeles
Steve Chen	Pharmacy	Barber-Pharmacist Coordination to Improve Blood Pressure Management in Black Men	Cedars-Sinai Medical Center
Steven Lopez	Psychology	Disparities in Mental Health Care for Latinos	US-National Institute on Minority Health and Health Disparities
Steven Lopez	Psychology	Disparities in Mental Health Care for Latinos with Serious Mental Illness	US-National Institute on Minority Health and Health Disparities
Steven Lopez	Psychology	Disparities in Mental Health Care for Latinos with Serious: Mental Illness	US-National Institute on Minority Health and Health Disparities

Steven Lopez	Psychology	Disparities in Mental Health for Latinos with Serious Mental Illness	US-National Institute on Minority Health and Health Disparities
Steven Lopez	Psychology	Reducing the duration of Untreated Psychosis through Community Education	US-National Institute of Mental Health
Sung-Shim Park	Preventive Medicine	Nicotine Metabolism and Predicting Lung Cancer Risk in African Americans	University of California - Tobacco-Related Disease Research Program
Susan Enguidanos	Davis School of Gerontology	Study of Secondary Analysis of Latino Diabetes Hospital to Home Transition Data	American Diabetes Association
Vicki Callahan	SCA Research	Women in Transmedia: A Gender Diverse Industry	Kings College London
Wendy Cozen	Preventive Medicine	Genome Wide Admixture Scan of Multiple Myeloma in African Americans	US-National Cancer Institute
William Gauderman	Preventive Medicine	Air Pollution effects on Asthma and Lung function in Hispanic Children	US-National Institute of Environmental Health Sciences
William Tierney	Pullias Center for Higher Education	Increasing Access for Underserved Students: I AM & SummerTIME 2016	Angell Foundation

Table 6. Clinical Trials at USC Studying Diversity

Source: iStar Database using keywords minority, Hispanic, African American, Black, Asian, Latino, diversity, community, underserved, gender, disparity, transgender, discrimination, LGBTQ and bias

ID	Name
HS-13-00843	Allopregnanolone for Treatment of TBI (Phase 2-W81 XWH-09-1-0746)
HS-13-00400	CQI Chart Review of Jail Misdemeanor Incompetent to Stand Trial (MIST) Program
HS-12-00550	Treatment of Anxiety Disorders in an Addictions Counseling Center
HS-12-00359	VEGF-A isoforms and evacizumab
HS-13-00810	1B-13-10-Rand/ CDX-011 Pt with Met, GPNMB over express BC
HS-07-00634	2N-07-4-Phase 2 Study of AB-869 (M6-880)
HS-12-00698	2N-12-3-LUX-Lung 8: PIII of Afatinib vs Erlotinib
HS-16-00215	2N-15-12: Rand/Ph3 efficacy study of ASP8273 vs Erlotinib/Gefitinib in Stage IIIB/IV NSCLC with EGRF mutations
HS-09-00058	2O-08-3-P 1b/2 of AMG 479 or AMG 102
HS-17-00829	3P-17-3 Ph3 BBI-608 + nab-Paclitaxel with Gemcitabine in Metastatic Pancreatic Adenocarcinoma
HS-11-00572	4B-11-2-Phase 2, Open-Label Study Evaluating Dn24-02
HS-15-00770	4B-15-10: P3 Blue Light Flexible Cystoscopy with Cysview
HS-15-00731	4B-15-4 Robotic Versus Open Radical Cystectomy
HS-16-00456	4DCT CEUS
HS-16-00952	4P-16-7: PII MR-guided vs. 12-core Systematic/Prostate
HS-14-00070	5U-13-1 PHII-129, NCI 9322 Ph 2 XL184 in recurrent/ met endometrial CA
HS-16-00164	9L-15-11-PhIII Rigosertib vs Physician's Choice of Tx/MD
HS-12-00781	A Discontinuation Trial of Atypical Anti-psychotic Medication
UP-17-00732	A Pilot Study of CSMP
HS-14-00491	A Randomized Clinical Trial Comparing Biodentine and White MTA in Primary Molar Pulpotomy
HS-16-00326	A5350
HS-10-00582	ACE in obese Latino youth
UP-10-00034	Adolescent Youth in Military Families
HS-13-00206	AFEDS
HS-13-00806	Allo Phase 1 Clinical Trial
HS-002003	ALZHEIMER'S DISEASE RESEARCH CENTER OF CALIFORNIA
HS-10-00332	APPROPRIATE
HS-14-00786	ASO 522
UP-13-00508	Assessing DUP and Literacy
HS-15-00199	Astellas YM178
UP-11-00332	At Risk Hispanic Gangs
UP-16-00499	ATSS, PNF, and Adjudicated College Student Drinking
HS-15-00820	Avance Nerve Graft Study
HS-12-00655	AZ Brilinta Ethnicity Study

HS-14-00863	BCI - Walking Simulator
HS-14-00694	BEAT study
HS-13-00789	BELLS
HS-07-00202	Biomarkers in HPV-Associated Oral Pre-Cancer
UP-06-00034	Biosocial Factors in Rehabilitation for Schizophrenia
HS-15-00700	BRIDGES
HS-09-00307	BRONJ
UP-08-00246	CAPE Adaptation and Effectiveness Study
UP-05-00098	Capitalizing on Spiritual Capital (Phase I)
HS-16-00421	CCTG 600
HS-17-00537	CCTG 603
HS-09-00450	CEM-102 Bacterial Skin Structure Study
UP-06-00446	CFIMA
UP-03-09-196	Childhood Precursors to Alcohol Involvement
HS-16-00888	Cholesterol efflux in AD
HS-16-00292	Clofazimine for E-G
HS-15-00417	Collaborative Connected Health (CCH): Evaluating Effectiveness of CCH in Psoriasis
HS-06-00327	Community-Acquired Pneumonia
HS-15-00460	Compare ceftazidime avibactam versus cefepime in children from 3 months to less than 18 years old with complicated urinary tract infections
HS-13-00828	CTSU/NSABP-51/RTOG1304 PIII Eval Nodal XRT and Post Lumpectomy
HS-17-00793	CTSU-EA8134 InPACT
UP-09-00225	Culture responsive one-session treatment
UP-04-05-194	Culture, Coping, and Schizophrenia
HS-13-00450	D2d Study
HS-10-00206	dalPLAQUE II
HS-CG-10-00030	DEB Patient Characterization
HS-17-00911	DIAN-TU
HS-12-00590	DoD ADNI
HS-15-00028	DORI Pilot Study of Abdominal Fat Inflammation in Obesity
HS-08-00604	Dotarem MRA in Renal Disease
HS-09-00368	Evaluating an Emergency Department Observation Syncope Protocol
UP-07-00005	Evaluating the Effectiveness of an Employment Program for Youth
UP-04-08-257	Evaluating the Effectiveness of Teo Parenting Interventions for African American Parents
HS-10-00055	Exercise and Breast Cancer
UP-13-00067	FA-R Pilot Test
HS-08-00008	FLT for Brain Cancer
HS-09-00100	GATE
HS-10-00465	GDM Offspring Study
HS-14-00826	GE Elastography Liver Study

HS-937001	GENETIC SUSCEPTIBILITY TO CANCER IN MULTIETHNIC COHORTS
HS-13-00225	Genetics and Smoking Study
HS-12-00290	Gliovac
HS-06-00566	GRACE
HS-05-00035	Guided imagery intervention for overweight adolescents
UP-15-00628	Health Trajectories, Drug Use & IPV SA Chicanas
HS-11-00446	Healthy Eating through Reduction Of Excess Sugar (HEROES)
HS-16-00835	Hemochron
HS-07-00085	HIV And Postpartum Depression
HS-16-00971	Home Study
HS-05-00351	Human papillomavirus and oral premalignant lesions
UP-16-00748	Hypocrisy Induction for Benevolent Sexism
UP-16-00745	Hypocrisy Induction for Sexism
UP-09-00290	Imaging Implicit Alcohol Associations
HS-05-00274	Immune reconstitution following HAART and HCV therapy
HS-17-00209	IMPAACT 2013: Safety and Immunogenicity of a Single Dose of the D46/NS2/N/ Δ M2-2-HindIII Vaccine
HS-17-00578	IMPAACT 2018: Safety and Immunogenicity of a Single Dose of the RSV Δ NS2/ Δ 1313/I1314L or RSV 276 Vaccine
HS-10-00556	INCIDENCE OF ENDOMETRIOSIS IN HISPANIC WOMEN UNDERGOING MINIMALLY INVASIVE SURGERY AT LAC+USC MEDICAL CENTER
UP-06-00172	Intimate Partner Aggression
HS-09-00077	Ipamorelin for post op ileus
UP-10-00468	Large Social Networks of Homeless Youth
UP-11-00129	Magnesium and Cognitive Ability
UP-15-00658	Meditation and Substance Abuse
HS-05-00162	ML18179 Latino Hepatitis C Study
HS-15-00894	Mother's Milk Study
UP-09-00219	Neural Substrates of Implicit Associations
HS-05-00410	Neuropsych
HS-11-00025	Nighttime study in AA
HS-15-00873	NK Cell Activity
HS-07-00436	Opt II
UP-17-00597	PEAS
HS-10-00286	Percutaneous biliary drainage in healthy patients with delayed presentation of acute cholecystitis
HS-17-00842	Phenotypes of A20 SNPs in IBD
HS-17-00169	PICASSO
HS-16-00446	PIONEER-CD
UP-17-00393	Point Source Youth Evaluation
UP-16-00734	Positive School Outcomes

UP-11-00249	POST-DEPLOYMENT REINTEGRATION FOR CA NG
HS-16-00759	PPG Study
UP-16-00112	Prison of Peace RCT
HS-14-00683	Probiotic Pilot Trial
UP-10-00385	Problem Solving Therapy for Depressed Mothers
UP-15-00276	Programa Esperanza
UP-11-00372	Project ABC 2
UP-17-00537	Proud to be Me- RCT
HS-17-00428	RAmP
HS-11-00554	RAPPT: Identifying psychological trauma in a Pediatric ER
UP-17-00210	Relationship Discussions
HS-17-00586	RSA Lesser Tuberosity Trial
HS-16-00371	Safety and Immunogenicity of a Single Dose of the LID ΔM2-2 1030s Vaccine
HS-16-00650	Safety and Immunogenicity of a Single Dose of the RSV LID cp ΔM2-2 Vaccine
UP-09-00164	SEI-NIMH R34
UP-00-02-060	Self-Reported Outcomes in a Randomized Trial of a Community-Based Multi-Agency Program for Mid-Risk Youth
HS-09-00680	Sequential TTTS RCT
UP-08-00204	Simeon Research Project
HS-11-00393	SIUGR Observational I
HS-11-00347	SKIN BIOPSY IN LEPROSY
UP-17-00538	SMASI R01
UP-06-00314	Social Identity Project
UP-10-00372	Social Work Intervention Focused on Transitions Among At-Risk Older Adults (SWIFT)
HS-15-00562	STEPP-UP
HS-13-00319	StepRite Evaluation
UP-16-00052	Substance use, Technology, and YMSM Recruitment
HS-16-00182	SURE-PD3
HS-12-00624	SWOG-E2410: PII - PET for Bulky I/ II Classical HL
HS-12-00641	SWOG-S1115: PH II AZD6244 + MK-2206 vs MFOLFOX pancreatic CA
HS-14-00723	SWOG-S1314 PII of Coxen+NeoAdj Chemo/Muscle-Inv Bladder CA
HS-16-00914	TCH in Atopic Derm
UP-11-00534	Teen Life Online and in Schools Project
HS-17-00406	TEXTMED+FANS Full Trial
HS-08-00646	The 1, 2, 3 Plan
HS-08-00137	THE AASK NOCTURNAL ABPM PILOT STUDY
HS-12-00045	The cancer genome atlas
UP-07-00202	The Effects of Stress on Reward Learning
HS-056011	THE INFLUENCE OF ACCULTURATION IN BONE DENSITY IN LATINAS
HS-12-00176	The role of the frontostriatal circuit in context dependent motor learning
HS-05-00317	Tifacogin in Severe Community-Acquired Pneumonia

UP-14-00049	Transitions to Housing R01
HS-09-00351	Treatment De-Intensification and Residual HIV-1 in Adolescents and Young Adults, A Sub-Study of ATN 061 and ATN 071 (ATN 081 Version 1.0, dated 02/20/09)
UP-15-00137	TTP User Study
HS-11-00198	TZP-101-CL-P007
UP-16-00046	Understanding HIV Risk for Youth in Supportive Housing
HS-14-00518	Using Mobile Phone-based Physical Activity Measurements in Clinical Weight Management
HS-15-00126	Vascular Cohort Study
HS-044009	VASCULAR RISK AND COGNITIVE STATUS IN A LATINO POPULATION
UP-11-00505	Violence Exposure: 2011 Peer Relations Wave
HS-09-00047	VITALITY
HS-11-00129	VR and IR effects on bone
UP-14-00391	Women's Health Study
UP-17-00463	Yoga Exposure for Latin students